CyberSource Secure Acceptance Web/Mobile

Configuration Guide

April 2016

CyberSource®
the power of payment

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CyberSource Contact Information

For general information about our company, products, and services, go to http://www.cybersource.com.

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For support information about any CyberSource Service, visit the Support Center at http://www.cybersource.com/support.

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Contents

Recent Revisions to This Document

Release	Changes
April 2016	■ Updated the “Secure Acceptance Transaction Flow” section. See page 13. ■ Removed the “Relaxed Requirements for Address Data and Expiration Date” section. ■ Added the “BIN Lookup” section. See page 23. ■ Added the **skip_bin_lookup** request field. See page 107. ■ Added the following reply fields (see page 109): • bin_lookup_billing_currency • bin_lookup_billing_currency_minor_digits • bin_lookup_card_category • bin_lookup_card_group • bin_lookup_card_type • bin_lookup_cross_border_indicator • bin_lookup_fast_funds_indicator • bin_lookup_issued_currency • bin_lookup_issuer_country • bin_lookup_issuer_name • bin_lookup_issuer_phone • bin_lookup_level_2_eligible • bin_lookup_level_3_eligible • bin_lookup_message • bin_lookup_oct_eligible • bin_lookup_oct_gambling_eligible • bin_lookup_reason_code • bin_lookup_request_time • req_skip_bin_lookup
January 2016	■ Updated the “Enabling Visa Checkout” section. See page 24. ■ Added the “Relaxed Requirements for Address Data and Expiration Date” section. ■ Added the following reply fields (see page 109): • payer_authentication_veres_timestamp • payer_authentication_pares_timestamp

Release	Changes
October 2015	■ Updated the Important Note for PayPal Express Checkout. See page 25. ■ Updated the “Locale Codes” table. See page 43.
September 2015	■ Added the “Enabling PayPal Express Checkout” section. See page 25. ■ Added the **override_paypal_order_setup** request field. See page 100. ■ Added the following reply fields (see page 109): • paypal_address_status • paypal_authorization_correlation_id • paypal_authorization_transaction_id • paypal_customer_email • paypal_do_capture_correlation_id • paypal_do_capture_transaction_id • paypal_ec_get_details_correlation_id • paypal_ec_get_details_request_id • paypal_ec_get_details_transaction_id • paypal_ec_order_setup_correlation_id • paypal_ec_order_setup_transaction_id • paypal_ec_set_request_id • paypal_fee_amount • paypal_order_request_id • paypal_payer_id • paypal_payer_status • paypal_pending_reason • paypal_pending_status • paypal_protection_eligibility • paypal_protection_eligibility_type • paypal_request_id • paypal_token • paypal_transaction_type • req_item_#_description
August 2015	■ Added the **override_backoffice_post_url** request field. See ■ Added the following reply fields (see page 109): • payer_authentication_enroll_e_commerce_indicator • payer_authentication_pares_status • payer_authentication_reason_code • payer_authentication_validate_result • payer_authentication_validate_e_commerce_indicator • req_override_backoffice_post_url
July 2015	■ Updated the format of the **echeck_effective_date** request field. See page 92.

About This Guide

Audience and Purpose

This guide is written for merchants who want to accept payments on a secure checkout hosted by CyberSource but who don't want to handle or store sensitive payment information on their own servers.

Using Secure Acceptance Web/Mobile requires minimal scripting skills. You must create a security script and modify your HTML form to invoke Secure Acceptance. You will also use the Business Center to review and manage orders.

Web Site Requirements

Your web site must meet the following requirements:

- Have shopping-cart or customer order creation software.
- Contain product pages in one of the supported scripting languages (see page 46).
- The IT infrastructure must be Public Key Infrastructure (PKI) enabled to use SSL-based form POST submissions.
- The IT infrastructure must be able to digitally sign customer data prior to submission to Secure Acceptance Web/Mobile.

page 46Conventions

Note, Important, and Warning Statements

Note

A *Note* contains helpful suggestions or references to material not contained in the document.

Important

An *Important* statement contains information essential to successfully completing a task or learning a concept.

Warning

A *Warning* contains information or instructions, which, if not heeded, can result in a security risk, irreversible loss of data, or significant cost in time or revenue or both.

Text and Command Conventions

Convention	Usage
bold	■ Field and service names in text; for example: Include the **transaction_type** field. ■ Items that you are instructed to act upon; for example: Click **Save**.
`monospace`	■ Code examples and samples. ■ Text that you enter in an API environment; for example: Set the **transaction_type** field to `create_payment_token`.

Related Documents

Refer to the Support Center for complete CyberSource technical documentation:

http://www.cybersource.com/support_center/support_documentation

Table 1 Related Documents

Subject	Description
Credit Card	The following documents describe how to integrate credit card processing into an order management system: ■ *Credit Card Services Using the SCMP API* (PDF | HTML) ■ *Credit Card Services Using the Simple Order API* (PDF | HTML)
Decision Manager	The following documents describes how to integrate and use the Decision Manager services. ■ *Decision Manager Developer Guide Using the SCMP API* (PDF | HTML) ■ *Decision Manager Developer Guide Using the Simple Order API* (PDF | HTML)
eCheck	The following documents describe how to integrate and use the eCheck services: ■ *Electronic Check Services Using the SCMP API* (PDF | HTML) ■ *Electronic Check Services Using the Simple Order API* (PDF | HTML)
Level II and Level III	*Level II and Level III Processing Using Secure Acceptance* (PDF | HTML)—describes each Level II and Level III API field and processing Level II and Level III transactions using Secure Acceptance.
Payer Authentication	The following documents describe how to integrate and use the payer authentication services: ■ *Payer Authentication Using the SCMP API* (PDF | HTML) ■ *Payer Authentication Using the Simple Order API* (PDF | HTML)
Payment Security Standards	Payment Card Industry Data Security Standard (PCI DSS)—web site offers standards and supporting materials to enhance payment card data security.
Payment Tokenization	The following documents describe how to create customer profiles and use payment tokens for on-demand payments: ■ *Payment Tokenization Using the Business Center* (PDF | HTML) ■ *Payment Tokenization Using the SCMP API* (PDF | HTML) ■ *Payment Tokenization Using the Simple Order API* (PDF | HTML)
PayPal Express Checkout	The following documents describes how to integrate and use the PayPal Express Checkout services: ■ *PayPal Express Checkout Services Using the SCMP API* (PDF | HTML) ■ *PayPal Express Checkout Services Using the Simple Order API* (PDF | HTML).

Table 1 Related Documents (Continued)

Subject	Description
Recurring Billing	The following documents describe how to create customer subscriptions and use payment tokens for recurring and installment payments: ■ *Recurring Billing Using the Business Center* (PDF | HTML) ■ *Recurring Billing Using the SCMP API* (PDF | HTML) ■ *Recurring Billing Using the Simple Order API* (PDF | HTML)
Reporting	*Reporting Developer Guide* (PDF | HTML)—describes how to view and configure Business Center reports.
Secure Acceptance	■ *Secure Acceptance Silent Order POST Development Guide* (PDF | HTML). ■ *Secure Acceptance Silent Order POST Service Fee Guide* (PDF)
Visa Checkout	*Getting Started with Visa Checkout* (PDF | HTML)—describes how to enroll in Visa Checkout and create a Visa Checkout profile.

Customer Support

For support information about any CyberSource service, visit the Support Center:

http://www.cybersource.com/support

CHAPTER 1

Using Secure Acceptance Web/Mobile

CyberSource Secure Acceptance Web/Mobile is your secure hosted customer checkout experience. It consists of securely managed payment forms or as a single page payment form for processing transactions, enabling you to decrease your Payment Card Industry Data Security Standard (PCI DSS) obligations and thereby reducing any risks associated with handling or storing sensitive payment information. You, the merchant, out-source payments to Secure Acceptance, which is designed to accept card payments.

Warning

Secure Acceptance is designed to process transaction requests directly from the customer browser so that sensitive payment data does not pass through your servers. If you do intend to send payment data from your servers, use the SOAP Toolkit API or the Simple Order API. Sending server-side payments using Secure Acceptance incurs unnecessary overhead and could result in the suspension of your merchant account and subsequent failure of transactions.

To create your customer's Secure Acceptance experience, you take these steps:

1. Create and configure Secure Acceptance profiles.
2. Update the code on your web site to invoke Secure Acceptance and immediately process card transactions (see page 46). Sensitive card data bypasses your network and is accepted by Secure Acceptance directly from the customer. CyberSource processes the transaction on your behalf by sending an approval request to your payment processor in real time. See "Secure Acceptance Transaction Flow," page 13.
3. Use the reply information to display an appropriate transaction response page to the customer. You can view and manage all orders in the Business Center (see page 80).

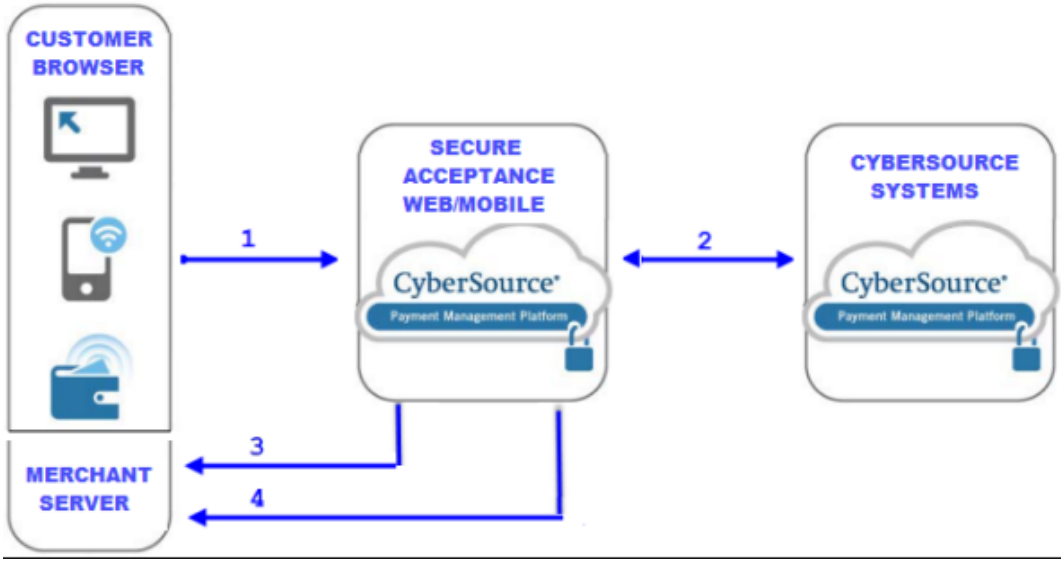
Profile

A Secure Acceptance profile consists of settings that you configure to create a customer checkout experience. You can create and edit multiple profiles, each offering a custom checkout experience (see page 39). For example, you might need multiple profiles for localized branding of your web sites.You can display a multi-step checkout process or a single page checkout (see page 29) to the customer as well as configure the appearance and branding, payment options, languages, and customer notifications.

Secure Acceptance Transaction Flow

The Secure Acceptance Web/Mobile transaction flow is illustrated in Figure 1 and described below.

Figure 1 Secure Acceptance Web/Mobile Transaction Flow



1 The customer clicks the Pay button on your web site, which triggers an HTTPS POST that directs the customer to the hosted Secure Acceptance Web Mobile page that you configured in the Business Center (see page 18). The HTTPS POST includes the signature and signed data fields containing the order information.

Note Secure Acceptance Web/Mobile works best with JavaScript and cookies enabled in the customer browser.

2 Secure Acceptance verifies the signature to ensure that the order details have not been tampered with and displays the Secure Acceptance Web Mobile checkout page. The customer enters and submits payment details and/or their billing and shipping information. The customer confirms the payment, and the transaction is processed.

3 CyberSource recommends that you configure a merchant POST email in the Business Center (see page 34) so that the signed transaction response is POSTed back to your merchant server through the browser. You must validate the reply signature to confirm that the reply data has not been tampered with. Secure Acceptance can also display a standard receipt page to your customer, and you can check the result of the transaction using the Business Center search or the standard CyberSource reports.

4 CyberSource recommends implementing the merchant POST URL notification (see page 34) as a backup means of determining the transaction result. This method does not rely on your customer's browser. You receive the transaction result even if your customer lost connection after confirming the payment.

   If the transaction type is sale, it is immediately submitted for settlement. If the transaction type is authorization, use the CyberSource Simple Order API to submit a capture request when goods are shipped.

Payment Tokens

Important Contact CyberSource Customer Support to activate your merchant account for the use of the payment tokenization services. You cannot use payment tokenization services until your account is activated and you have enabled payment tokenization for Secure Acceptance (see page 18).

Payment tokens are unique identifiers that replace sensitive card information and that cannot be mathematically reversed. CyberSource securely stores all the card information, replacing it with the payment token. The token is also known as a *subscription ID*, which you store on your server.

The payment tokenization solution is compatible with the Visa and MasterCard Account Updater service. All payment information stored with CyberSource is automatically updated by participating banks, thereby reducing payment failures. See the *Account Updater User Guide* (PDF | HTML).

The payment token identifies the card and retrieves the associated billing, shipping, and card information. No sensitive card information is stored on your servers, thereby reducing your PCI DSS obligations.

Table 2 Types of Payment Tokens

Type	Description
22 digit	The default payment token.
16 digit	Displays the last four digits of the primary account number (PAN) and passes Luhn mod-10 checks.
16 digit	Displays *99* as the two leading digits and passes Luhn mod-10 checks. If your business rules prohibit using 99 as the leading digits, you must modify your system to accept the other 16-digit payment token.

Note When you include the payment token, the billing, shipping, and card information is displayed on the Order Review page of Secure Acceptance.

one-click Checkout

With *one-click Checkout*, customers can buy products with a single click. Secure Acceptance is integrated to CyberSource Tokenization, so returning customers are not required to enter their payment details. Before a customer can use one-click Checkout, he or she must create a payment token during the first transaction on the merchant web site. See page 51. The payment token is an identifier for the payment details; therefore, no further purchases require that you enter any information. When the payment token is included in a payment request, it retrieves the card, billing, and shipping information related to the original payment request from the CyberSource database.

To use one-click Checkout, you must include the one-click Checkout endpoint to process the transaction. See page 68.

Subscription Payments

A customer subscription contains information that you store in the CyberSource database and use for future billing. At any time, you can send a request to bill the customer for an amount you specify, and CyberSource uses the payment token to retrieve the card, billing, and shipping information to process the transaction. You can also view the customer subscription in the CyberSource Business Center. See "Viewing Transactions in the Business Center," page 76.

A customer subscription includes:

- Customer contact information, such as billing and shipping information.
- Customer payment information, such as card type, masked account number, and expiration date.
- Customer order information, such as the transaction reference number and merchant-defined data fields.

Table 3 Types of Subscriptions

Type of Subscription	Description
Recurring	A recurring billing service with no specific end date. You must specify the amount and frequency of each payment and the start date for processing the payments. CyberSource creates a schedule based on this information and automatically bills the customer according to the schedule. For example, you can offer an online service that the customer subscribes to and can charge a monthly fee for this service. See "Payment Token for Recurring Payments," page 55.
Installment	A recurring billing service with a fixed number of scheduled payments. You must specify the number of payments, the amount and frequency of each payment, and the start date for processing the payments. CyberSource creates a schedule based on this information and automatically bills the customer according to the schedule. For example, you can offer a product for 75.00 and let the customer pay in three installments of 25.00. See "Payment Token for Installment Payments," page 57.

Level II and III Data

Secure Acceptance supports Level II and III data. Level II cards, also know as *Type II cards*, provide customers with additional information on their credit card statements. Business/corporate cards along with purchase/procurement cards are considered Level II cards.

Level III data can be provided for purchase cards, which are credit cards used by employees to make purchases for their company. You provide additional detailed information—the Level III data—about the purchase card order during the settlement process. The Level III data is forwarded to the company that made the purchase, and it enables the company to manage its purchasing activities.

For detailed descriptions of each Level II and Level III API field, see *Level II and Level III Processing Using Secure Acceptance* (PDF | HTML). This guide also describes how to request sale and capture transactions.

Go-Live with Secure Acceptance

Important CyberSource recommends that you submit all banking information and required integration services in advance of going live. Doing so will speed up your merchant account configuration.

When you are ready to implement Secure Acceptance in your live environment, you must contact CyberSource Customer Support and request Go-Live. When all the banking information has been received by CyberSource the Go-Live procedure may require three days to complete. No Go-Live implementations take place on a Friday.

CHAPTER 2

Creating a Web/Mobile Profile

Important Contact CyberSource Customer Support to enable your account for Secure Acceptance. You must activate a profile in order to use it (see page 45).

To create a Web/Mobile profile:

Step 1 Log in to the Business Center:

- Live transactions: https://ebc.cybersource.com
- Test transactions: https://ebctest.cybersource.com

Step 2 In the left navigation panel, choose **Tools & Settings > Secure Acceptance > Profiles**.

Step 3 Enter or check the following profile details.

Table 4 Profile Details

Profile Detail	Description
Profile Name	The Secure Acceptance profile name is required and cannot exceed 20 alphanumeric characters.
Description	The profile description cannot exceed 255 characters.
Integration Method	Check **Web/Mobile**.
Company Name	The company name is required and cannot exceed 40 alphanumeric characters.
Company Contact Name	Enter company contact information: name, email, and phone number.
Company Contact Email	
Company Phone Number	
Payment Tokenization	Check **Payment Tokenization**. For more information, see page 51.
Decision Manager	Check **Decision Manager**. For more information, see page 77.
Enable Verbose Data	Check **Enable Verbose Data**. For more information, see page 77.
Generate Device Fingerprint	Check **Generate Device Fingerprint**. For more information, see page 77.
BIN Lookup	Check **BIN Lookup**. For more information, see page 23.

Step 4 Click **Create**. The Configuring Payment Settings page appears. See "Configuring Payment Methods" for more information.

Configuring Payment Methods

Important You must configure at least one payment method before you can activate a profile.

A payment method selection page is displayed as part of the checkout process for any of the following scenarios:

- multiple payment methods are enabled for the profile and no **payment_method** field is included in the request.
- Visa Checkout is the only enabled payment method for the profile (see page 24).
- **payment_method=visacheckout** is included in the request.

You can skip the payment method selection page by specifying card or echeck (see page 23) as the only available payment method.

Note During the checkout process, customers can change the payment method.

Adding a Card Type

For each card type you select, you can also manage currencies and payer authentication options. Select only the types of credit cards and currencies that your merchant account provider authorizes.

Note The Card Verification Number (CVN) is a three- or four-digit number that helps ensure that the customer has possession of the card at the time of the transaction.

To add a card type and enable the CVN:

Step 1 Click **Payment Settings**. The Payment Settings page appears.

Step 2 Click **Add/Edit Card Types**. The Add/Edit Card Types page appears.

Step 3 Check each card type that you want to offer to the customer as a payment method. The card types must be supported by your payment processor.

Step 4 Click **Update**.

Step 5 Click the pencil icon in the column for each card type. The Edit Card Settings page appears.

Step 6 Check **CVN Display** to display the CVN field on Secure Acceptance. The customer decides whether to enter the CVN. CyberSource recommends displaying the CVN to reduce fraud.

Step 7 Check **CVN Required**. The CVN Display option must also be checked. If this option is checked, the customer is required to enter the CVN. CyberSource recommends requiring the CVN to reduce fraud.

Step 8 Click **Update**. The card types are added as an accepted payment type.

Step 9 Click **Save**.

Enabling Payer Authentication

Important

Before you can use CyberSource Payer Authentication, you must contact CyberSource Customer Support to provide information about your company and your acquiring bank so that CyberSource can configure your account. Your merchant ID must be enabled for payer authentication. For more information about Payer Authentication, see "Related Documents," page 10.

Payer authentication is the CyberSource implementation of 3D Secure and deters unauthorized card use and provides added protection from fraudulent chargeback activity.

For Secure Acceptance, CyberSource supports the following kinds of payer authentication:

- American Express SafeKey
- MasterCard SecureCode
- Verified by Visa
- J/Secure by JCB

For each transaction, you receive detailed information in the replies and in the transaction details page of the Business Center. You can store this information for 12 months. CyberSource recommends that you store the payer authentication data because you may be required to display this information as enrollment verification for any payer authentication transaction that you re-present because of a chargeback.

Your merchant account provider may require that you provide all data in human-readable format. Make sure that you can decode the PAReq and PARes.


Note

The language used on each Payer Authentication page is determined by your issuing bank and overrides the locale you have specified. If you use the test card numbers for testing purposes the default language used on the Payer Authentication page is English and overrides the locale you have specified. See "Testing and Viewing Transactions," page 79.

To configure payer authentication:

Step 1 Click the pencil icon in the column for each card type. The Edit Card Settings page appears.

Step 2 Check **Payer Authentication** for each card type that you want to offer to the customer as a payment method. The card types that support payer authentication are:

- Amex
- JCB
- MasterCard
- Maestro (UK Domestic or International)
- Visa

Step 3 Click **Update**.

Adding a Currency


Important

By default, all currencies are listed as disabled. You must select at least one currency. Contact your merchant account provider for a list of supported currencies. If you select the Elo or Hipercard card type, only the Brazilian Real currency is supported.

To add a supported currency for each card type:

Step 1 Click the pencil icon in the column for each card type. The Edit Card Settings page appears.

Step 2 Click **Select All** or select a currency and use the arrow to move it from the Disabled list to the Enabled list.

Step 3 Click **Update**.

Enabling Automatic Authorization Reversals

For transactions that fail to return an Address Verification System (AVS) or a Card Verification Number (CVN) match, you can enable Secure Acceptance to perform an automatic authorization reversal. An automatic reversal releases the reserved funds held against a customer's card.

To enable automatic authorization reversals:

Step 1 Check **Fails AVS check**. Authorization is automatically reversed on a transaction that fails an AVS check.

Step 2 Check **Fails CVN check**. Authorization is automatically reversed on a transaction that fails a CVN check.

Step 3 Click **Save**.

Important When the AVS and CVN options are disabled and the transaction fails an AVS or CVN check, the customer is notified that the transaction was accepted. You are notified to review the transaction details (see "Types of Notifications," page 143).

Enabling BIN Lookup

Note

If enabled, the BIN lookup service is automatically requested when the payment method is **card** or **visacheckout** and **decision=ACCEPT**.

A bank identification number (BIN), the first six digits on a credit card or debit card, is assigned by a payment card company to identify a specific bank or issuer. The BIN lookup service returns detailed information about the credit card or debit card. To enable BIN lookup, see page 18.

Important

For Secure Acceptance, a card type is a value such as Visa, MasterCard, or American Express. The BIN lookup service does the following:

- Returns a value such as Visa, MasterCard, or American Express in the **bin_lookup_card_group** reply field.
- Returns a value such as debit, corporate, or prepaid in the **bin_lookup_card_type** reply field.

Enabling eChecks

An eChecks is a payment made directly from your customer's U.S. or Canadian bank account. As part of the checkout process, you must display a terms and conditions statement for eChecks. For more information, see TeleCheck Check Acceptance.

A customer must accept the terms and conditions before submitting an order. Within the terms and conditions statement it is recommended to include a link to the table of returned item fees. The table lists by state the amount that your customer has to pay when a check is returned.

To enable the eCheck payment method:

Step 1 Check **eCheck payments enabled**.

Step 2 Click the pencil icon in the currencies table. The Electronic Check Settings page appears.

Step 3 Click **Select All** or select a currency and use the arrow to move it from the Disabled list to the Enabled list.

Step 4 Click **Update**.

Step 5 Click **Save**. You must configure the eCheck information fields. See "Displaying eCheck Information Fields," page 32.

Enabling Visa Checkout

Important

You must enroll in Visa Checkout and create a Visa Checkout profile before you can enable it as a payment method. See *Getting Started with Visa Checkout* (PDF | HTML). Only the authorization and sale transaction types are supported for Visa Checkout transactions.

Note

The payment methods selection page is displayed as part of the checkout process for either of the following scenarios:

- multiple payment methods are enabled for the profile and no **payment_method** field is included in the request
- Visa Checkout is the only enabled payment method for the profile
- **payment_method=visacheckout** is included in the request.

Visa Checkout requires the customer to enter only a user name and password to pay for goods. It eliminates the need to enter account, shipping, and billing information. The customer logs in to their Visa Checkout account and chooses the card with which they would like to pay. If the Secure Acceptance profile is enabled to request the payer authentication service for a specific card type (see Step 3), the customer is redirected to the relevant payer authentication screen before Secure Acceptance processes the transaction and redirects the customer to your web site.

To enable the Visa Checkout payment method:

Step 1 Check **Visa Checkout enabled**.

Step 2 Enter the name of the Visa Checkout profile to be used. If no profile name is entered the default Visa Checkout profile is used.

Step 3 Check the card types to request the payer authentication service (see page 20) for:

- Visa—the Verified by Visa service is requested.
- MasterCard—the MasterCard SecureCode service is requested.
- American Express—the American Express SafeKey service is requested.

Step 4 Indicate when to reject transactions based on a certain criterion:

- Billing address details are incorrect (AVS fail).
- Security code is incorrect (CVV/CVN fail).
- The Visa checkout risk score is above your specified score. Select the risk score to use with your fraud model. A value of 0 indicates that a risk score will not be taken in account and a higher risk score indicates a higher perceived fraud risk.

Step 5 Click **Save**.

Enabling PayPal Express Checkout


Important

PayPal Express Checkout is not supported on a Secure Acceptance iFrame integration.

Contact CyberSource Customer Support to have your CyberSource account configured for this feature. You must also create a PayPal business account; see P*ayPal Express Checkout Services Using the SCMP API* (PDF | HTML) or *PayPal Express Checkout Services Using the Simple Order API* (PDF | HTML).

Add the PayPal Express Checkout payment method to the Secure Acceptance Web/Mobile payment methods selection page. Redirect the customer to their PayPal account login. When logged into their Paypal account they can review orders, and edit shipping or payment details before completing transactions.


Note

The payment methods selection page is displayed as part of the checkout process when multiple payment methods are enabled for the profile and no **payment_method** field is included in the request. If you include **payment_method=paypal** in the request, the payment methods selection page is not displayed and the customer is redirected to PayPal.

To enable the PayPal Express Checkout payment method:

Step 1 Check **Paypal Express Checkout enabled**.

Step 2 **Allow customers to select or edit their shipping address within PayPal**—check this option to allow customers to edit their shipping address details that were provided in the transaction request to Secure Acceptance. Customers select a new address or edit the address when they are logged in to their PayPal account.

Step 3 When the transaction type is authorization, check one of the following options:

- **Request a PayPal authorization and include the authorization reply values in the response**—check this option to create and authorize the PayPal order.

  
  Important

  The customer funds are not captured using this option. You must request a PayPal capture; see P*ayPal Express Checkout Services Using the SCMP API* (PDF | HTML) or *PayPal Express Checkout Services Using the Simple Order API* (PDF | HTML). If the transaction type is **sale**, Secure Acceptance authorizes and captures the customer funds.

- **Request a PayPal order setup and include the order setup reply values in the response**—check this option to create the PayPal order.


Important

The customer funds are not authorized or captured using this option. You must request a PayPal authorization followed by a PayPal capture request; see P*ayPal Express Checkout Services Using the SCMP API* (PDF | HTML) or *PayPal Express Checkout Services Using the Simple Order API* (PDF | HTML). If the transaction type is **sale**, Secure Acceptance authorizes and captures the customer funds.

Step 4 Click **Save**.

Enabling the Service Fee


Important

Contact CyberSource Customer Support to have your CyberSource account configured for this feature. Service fees are supported only if Wells Fargo is your acquiring bank and FDC Nashville Global is your payment processor.

The service fee setting applies to the card and eCheck payment methods. To apply the service fee to only one payment method, create two Secure Acceptance profiles with the appropriate payment methods enabled on each: one with the service fee feature enabled and one with the service fee feature disabled.

As part of the checkout process, you must display a terms and conditions statement for the service fee. A customer must accept the terms and conditions before submitting an order.

To enable the service fee:

Step 1 Check **Service Fee applies on transactions using this profile**. The service fee terms and conditions URL and the service fee amount are added to the customer review page.


Warning

Transactions fail if you disable this feature. Do not disable this feature unless instructed to do so by your account manager.

Step 2 Click **Save**.


Important

After you save the profile you cannot disable the service fee functionality for that profile. All transactions using the profile will include the service fee amount.

Creating a Security Key

Important

You must create a security key before you can activate a profile.

Note

You cannot use the same security key for both test and live transactions. You must download a security key for both versions of Secure Acceptance:

- For live transactions: https://ebc.cybersource.com
- For test transactions: https://ebctest.cybersource.com

On the Profile Settings page, click **Security**. The Security Keys page appears. The security script signs the request fields using the secret key and the HMAC SHA256 algorithm. To verify data, the security script generates a signature to compare with the signature returned from the Secure Acceptance server. You must have an active security key to activate a profile. A security key expires in two years and protects each transaction from data tampering.

To create and activate a security key:

Step 1 Click **Security**. The Security page appears.

Step 2 Click **Create New Key**. The Create New Key page appears.

Step 3 Enter a key name (required).

Step 4 Choose signature version **Version 1**.

Step 5 Choose signature method **HMAC-SHA256**.

Step 6 Click **Generate Key**. The Create New Key window expands and displays the new access key and secret key. This window closes after 30 seconds.

Step 7 Copy and save the access key and secret key.

- Access key: Secure Sockets Layer (SSL) authentication with Secure Acceptance. You can have many access keys per profile. See page 46page 46.
- Secret key: signs the transaction data and is required for each transaction. Copy and paste this secret key into your security script. See page 46page 46.

Important Remember to delete the copied keys from your clipboard or cached memory.

By default, the new security key is active. The other options for each security key are:

- Deactivate: deactivates the security key. The security key is inactive.
- Activate: activates an inactive security key.
- View: displays the access key and security key.

Note When you create a security key, it is displayed in the security keys table. You can select a table row to display the access key and the secret key for that specific security key.

Step 8 Click **Return to Profile home**. The Configuring Profile Settings page appears.

Configuring the Checkout

The payment form is the customer's checkout experience. It consists of either a series of pages or as a single checkout page in which the customer enters or reviews information before submitting a transaction. Select the fields that you want displayed on the single checkout page or on each page of the multi-step checkout process: billing, shipping, payment, and order review.

Configuring the Checkout Flow

To configure the checkout flow:

Step 1 Click **Payment Form**. The Payment Form page appears.

Step 2 Check the checkout flow:

- Multi-step payment form—the checkout process consists of a sequence of pages on which the customer enters or reviews information before submitting a transaction. The default sequence is payment selection (if multiple payment methods are enabled), billing, shipping, payment, review, and receipt.
- Single page form—the checkout process consists of one page on which the customer enters or reviews information before submitting a transaction.

Note Do not click **Save** until you have selected the billing or shipping fields, or both

Step 3 Click **Save**. The Configuring Profile Settings page appears.

Displaying the Tax Amount

Follow these steps to display the total tax amount of the transaction as a separate line on each window of the checkout process. The total tax amount must be included in each transaction.

To display the tax amount:

Step 1 Check Display the total tax amount in each step of the checkout process.

Important Calculate and include the total tax amount in the **tax_amount** API field.

Note Do not click Save until you have selected the billing or shipping fields or both.

Step 2 Click **Save**. The Configuring Profile Settings page appears.

Displaying Billing Information Fields

Important Select the billing information fields that are required by your merchant provider. If the billing country is U.S. or CA, you have the option to select the state code field as a required field. CyberSource recommends that if the billing country is U.S. or CA, the state code and the postal code fields are selected as required. If the billing country is located in the rest of the world, you also have the option to select the state code field as a required field.

Select the customer billing information fields that you want displayed on Secure Acceptance. If these fields are captured at an earlier stage of the order process (for example on your web site), they can be passed into Secure Acceptance as hidden form fields (see page 83). Not selecting billing information allows you to shorten the checkout process.

To display and edit the billing information fields:

Step 1 Check Billing Information. The billing information fields appear.

Step 2 Check the billing information fields that are required by your merchant provider. The options for each field are:

- Display: the customer can view the information displayed in this field. Choose this option if you want to pre-populate the billing information fields when Secure Acceptance Web/Mobile is rendered—these fields must be passed into Secure Acceptance as hidden form fields.
- Edit: the customer can view and edit the billing information on the Secure Acceptance Web/Mobile checkout. When you select this option, the display option is automatically selected.
- Require: the customer is required to enter the billing information on the Secure Acceptance Web/Mobile checkout before they submit the transaction. When you select this option, all other options are automatically selected.

Note Do not click **Save** until you have selected the shipping and order review fields.

Step 3 Click **Save**. The Configuring Profile Settings page appears.

Displaying Shipping Information Fields

Important Select the shipping information fields that are required by your merchant provider.

Select the customer shipping information fields that you want displayed on Secure Acceptance. These fields are optional. If you do not add these fields, the shipping information step is removed from Secure Acceptance. If these fields are captured at an earlier stage of the order process (for example, on your web site), they can be passed into Secure Acceptance as hidden form fields (see page 83). Not selecting shipping information shortens the checkout process.

To display and edit shipping information fields:

Step 1 Check **Shipping Information**.

Step 2 Check the shipping information fields that are required by your merchant provider. The options for each field are:

- Display: the customer can view the information displayed in this field. Choose this option if you want to pre-populate the shipping information fields when Secure Acceptance Web/Mobile is rendered—these fields must be passed into Secure Acceptance as hidden form fields.
- Edit: the customer can view and edit the shipping information on the Secure Acceptance Web/Mobile checkout. When you select this option, the display option is automatically selected.
- Require: the customer is required to enter the shipping information on the Secure Acceptance Web/Mobile checkout before they submit the transaction. When you select this option, all other options are automatically selected.

Note

Do not click **Save** until you have selected the shipping and order review fields.

Step 3 Click Save. The Configuring Profile Settings page appears.

Displaying eCheck Information Fields

Important

Select the eCheck account information fields that are required by your merchant provider.

Select the customer eCheck account information fields that you want displayed on Secure Acceptance.

To display and edit eCheck information fields:

Step 1 Check the eCheck account information to be included in Secure Acceptance. The options for each field are:

- Display: the customer can view the information displayed in this field. Choose this option if you want to pre-populate the eCheck information fields when Secure Acceptance Web/Mobile is rendered.

- Edit: the customer can view and edit the eCheck information on the Secure Acceptance Web/Mobile checkout. When you select this option, the display option is automatically selected.
- Require: the customer is required to enter the eCheck information on the Secure Acceptance Web/Mobile checkout before they submit the transaction. When you select this option, all other options are automatically selected.


Note

Do not click **Save** until you have selected the shipping and order review fields.

Step 2 Click **Save**. The Configuring Profile Settings page appears.

Customizing Order Review Details

Select the fields that you want displayed on the Order Review page of Secure Acceptance Web/Mobile. The customer reviews this information before submitting a transaction.

To display and edit order review fields:

Step 1 Check the fields that you want displayed on the Order Review page of Secure Acceptance Web/Mobile. The options for each field are:

- Display: the customer can view the information contained in this field. Available only for billing and shipping information.
- Edit: the customer can view and edit the information contained in this field.

Step 2 Click Save. The Configuring Profile Setting page appears.

Receiving Merchant Notifications

Secure Acceptance sends merchant and customer notifications in response to transactions. You can receive a merchant notification by email or as an HTTPS POST to a URL for each transaction processed. Both notifications contain the same transaction result data.

Important CyberSource recommends that you implement the merchant POST URL to receive notification of each transaction. You need to parse the transaction response sent to the merchant POST URL and store the data within your systems. This ensures the accuracy of the transactions and informs you if the transaction was successfully processed.

To configure merchant notifications:

Step 1 Click **Notifications**. The Notifications page appears.

Step 2 Choose a merchant notification in one of two ways:

- Check **Merchant POST URL**. Enter the HTTPS URL. CyberSource sends transaction information to this URL. For more information, see "Reply Fields," page 109.

  Important Only an HTTPS URL should be used for the merchant POST URL. Use ports 80, 443, or 8080 in the URL. Contact CyberSource Customer Support if you encounter any problems.

- Check **Merchant POST Email**. Enter your email address.

  Important CyberSource sends transaction response information to this email address including payment information, return codes, and all relevant order information. See "Reply Fields," page 109.

Step 3 Choose the card number digits that you want displayed in the merchant or customer receipt:

- Return credit card BIN: displays the card's Bank Identification Number (BIN), which is the first six digits of the card number. All other digits are masked: 123456xxxxxxxxxx
- Return last four digits of credit card number: displays the last four digits of the card number. All other digits are masked: xxxxxxxxxxxx1234
- Return BIN and last four digits of credit card number: displays the BIN and the last four digits of the card number. All other digits are masked: 123456xxxxxx1234

Step 4 Continue to configure the customer notifications (see page 35) or click **Save**. The Profile Settings page appears.

Sending a Customer Receipt

You can send a purchase receipt email to your customer and a copy to your own email address. Both are optional. Customers may reply with questions regarding their purchases, so use an active email account. The email format is HTML unless your customer email is rich text format (RTF).

Customer Notification Details

To configure customer notifications:

Step 1 Check **Email Receipt to Customer.**

Step 2 Enter the email address to be displayed on the customer receipt. The customer will reply to this email with any queries.

Step 3 Enter the name of your business. It is displayed on the customer receipt.

Step 4 Check **Send a copy to**. This setting is optional.

Step 5 Enter your email address to receive a copy of the customer's receipt.

Note

Your copy of the customer receipt will contain additional transaction response information.

Step 6 Click **Save**. The Configuring Profile Settings page appears.

Company Logo

To add a company logo to the customer receipt and email:

Step 1 Check **Email Receipt to Customer.**

Step 2 Check **Display Notification Logo**.

Step 3 Click **Upload Company Logo**. Find and upload the image that you want to display on the customer receipt and email.

Important For preview, an image must not exceed 200 (w) x 60 (h) pixels. The image file type must be GIF, JPEG, or PNG. The logo filename must not contain any special characters, such as a hyphen (-).

Step 4 Click **Save**.

Custom Email Receipt

Important CyberSource recommends that you implement a DNS configuration to enable CyberSource to send email receipts on your behalf.

To create a customer email receipt:

Step 1 Check **Email Receipt to Customer.**

Step 2 Check which email receipt you would like to send to a customer:

- Standard email: this email is automatically translated based on the locale used for the transaction.
- Custom email: this email can be customized with text and data references. The email body section containing the transaction detail appears between the header and footer. Custom text is not translated when using different locales.

  You can insert email smart tags to both the email header and footer sections to include specific information.

Step 3 Select each specific smart tag from the drop-down list and click **Insert**.

Step 4 Click **Save**.

Displaying a Response Page

Important You must configure the customer response page before you can activate a profile.

You can choose to have a transaction response page displayed to the customer at the end of the checkout process, and a cancel response page displayed during the checkout process. Enter a URL for your own customer response page or use the CyberSource hosted response pages. Depending upon the transaction result, the CyberSource hosted response pages are Accept, Decline, or Error. Review declined orders as soon as possible because you may be able to correct problems related to address or card verification, or you may be able to obtain a verbal authorization. You can also choose to display a web page to the customer after the checkout process is completed.

Transaction Response Page

CyberSource Hosted Response Page

To display a CyberSource hosted response page:

Step 1 Click **Customer Response Pages**. The Customer Response Pages page appears.

Step 2 Under the Transaction Response Page heading, check **Hosted by CyberSource**.

Step 3 Under the Transaction Response Message heading, choose a number from the **Retry Limit** drop-down list. The maximum number of times a customer can retry a declined transaction is 5.

Step 4 Under the Customer Redirect after Checkout heading, enter the redirect URL of the web page. This web page is displayed to the customer after the checkout process is completed.

Step 5 Click **Save**. The Profile Settings page appears.

Custom Hosted Response Page

To display your custom response page:

Step 1 Under the Transaction Response Page heading, check **Hosted by You**.

Step 2 Enter the URL for your customer response page. Use port 80, 443, or 8080 in your URL.

Note Only port 443 should be used with a HTTPS URL. Parse the transaction results from the URL according to the reason code (see page 140), and redirect your customer to the appropriate response page.

Step 3 Under the Transaction Response Message heading, choose a number from the **Retry Limit** drop-down list. The maximum number of times a customer can retry a declined transaction is 5.

Step 4 Under the Customer Redirect after Checkout heading, enter the redirect URL of the web page. This web page is displayed to the customer after the checkout process is completed.

Step 5 Click **Save**. The Configuring Profile Settings page appears.

Cancel Response Page

CyberSource Hosted Response Page

To display a CyberSource hosted response page:

Step 1 Under the Custom Cancel Response Page heading, check **Hosted by CyberSource**.

Step 2 Click **Save**. The Configuring Profile Settings page appears.

Custom Cancel Response Page

To display your custom cancel response page:

Step 1 Under the Custom Cancel Response Page heading, check **Hosted by You**.

Step 2 Enter the URL for your customer response page. Use port 80, 443, or 8080 in your URL.

Note Only port 443 should be used with a HTTPS URL. Parse the transaction results from the URL according to the reason code (see page 140), and redirect your customer to the appropriate response page.

Step 3 Click Save. The Configuring Profile Settings page appears.

Customizing the Checkout Appearance

Customize the appearance and branding of the Secure Acceptance checkout pages by choosing a background color, font, and text color. Upload a logo or image, and align it within the header or footer.

Important CyberSource recommends that you preview your changes in the Image Preview window. For preview, the image must not exceed 200 (w) x 60 (h) pixels.

To change the header content:

Step 1 Click **Appearance and Branding**. The Appearance and Branding page appears.

Step 2 Check **Display Header.**

Step 3 Choose a color in one of two ways:

- Enter a hexadecimal value for the header color of the payment form.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 4 Click **Upload Header Image**. Upload the image to display as the header banner or as a logo within the header banner.

Step 5 Check the alignment option for the image or logo: left-aligned, centered, or right-aligned.

Step 6 Click **Save**.

Important To display an image as the header banner of the payment form, the image dimensions must not exceed 840 (w) x 60 (h) pixels and the image size must not exceed 100Kb. To display a small logo within the header banner, the logo height must not exceed 60 pixels. The image file must be GIF, JPEG, or PNG.

To change the main body color and font settings:

Step 1 Choose a background color for the main body in one of two ways:

- Enter a hexadecimal value for the background color.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 2 Select a text font from the drop-down list.

Step 3 Choose a text color in one of two ways:

- Enter a hexadecimal value for the background color.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 4 Click **Save**.

Step 5 Click **Set to Default** to restore all the default settings on this page.

To change the background color and text color of the total amount:

Important If you are implementing the iFrame embedded version of Secure Acceptance Web/Mobile, the total amount figure is not displayed within the iFrame. Any settings you select below are ignored.

Step 1 Choose a background color in one of two ways:

- Enter a hexadecimal value for the background color.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 2 Choose a text color in one of two ways:

- Enter a hexadecimal value for the text color of the total amount.

- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 3 Click **Save**.

Step 4 Click **Set to Default** to restore all the default settings on this page.

To change the color of the progress bar:

Step 1 Choose a color in one of two ways:

- Enter a hexadecimal value for the color of the progress bar.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 2 Click **Save**.

Step 3 Click **Set to Default** to restore all the default settings on this page.

To change the color and text displayed on the pay or finish button:

Step 1 Choose a background color of the pay or the finish button in one of two ways:

- Enter a hexadecimal value for the background color.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 2 Choose a color of the pay or the finish button text in one of two ways:

- Enter a hexadecimal value for the text.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 3 Check **Change Button text.** A text box appears for the pay button. Enter the text you want displayed on the button. The default is *Pay.*A text box appears for the finish button. Enter the text you want displayed on the button. The default is *Finish*.Click **Save**.

Step 4 Click **Set to Default** to restore all the default settings on this page.

To change the footer color and upload a small logo or image:

Step 1 Check Display Footer.

Step 2 Choose a color in one of two ways:

- Enter a hexadecimal value for the footer color of the payment form.
- Click within the header color palette to choose a color. Click the icon at the bottom right to confirm your selection.

Step 3 Click Upload Footer Image. Upload the image that you want displayed within the footer of the payment form.

Important To display a small logo or image in the footer of the payment form, the file must not exceed 840 (w) x 60 (h) pixels. The image file must be GIF, JPEG, or PNG.

Step 4 Check the alignment option for the image: left-aligned, centered, or right-aligned.

Important For preview, an image must not exceed 200 (w) x 60 (h) pixels.

Step 5 Click **Save**.

Step 6 Click **Set to Default** to restore all the default settings on this page.

Localizing the Checkout Languages

Secure Acceptance supports 41 languages for localization purposes. The table below lists all the supported languages and the locale code you must include in your payment form.

To specify and display the local language on Secure Acceptance:

Step 1 Click **Localization**. The Localization page appears.

Step 2 From the list, include the specific **locale** API field in your payment form.

Step 3 Enter the locale code in the API field. See page 46page 46.

Example American English

```
<input type="hidden" name="locale" value="en-us">
```

Table 5 Locale Codes

Language	Locale Code
Arabic	ar-xn
Cambodia	km-kh
Chinese—Hong Kong	zh-hk
Chinese—Maco	zh-mo
Chinese—Mainland	zh-cn
Chinese—Singapore	zh-sg
Chinese—Taiwan	zh-tw
Czech	cz-cz
Danish	da-dk
Dutch	nl-nl
English—American	en-us
English—Australia	en-au
English—Britain	en-gb
English—Canada	en-ca
English—Ireland	en-ie
English—New Zealand	en-nz
French	fr-fr
French—Canada	fr-ca
German	de-de

Table 5 Locale Codes (Continued)

Language	Locale Code
German—Austria	de-at
Hungary	hu-hu
Indonesian	id-id
Italian	it-it
Japanese	ja-jp
Korean	ko-kr
Lao People's Democratic Republic	lo-la
Malaysian Bahasa	ms-my
Norwegian (Bokmal)	nb-no
Philippines Tagalog	tl-ph
Polish	pl-pl
Portuguese—Brazil	pt-br
Russian	ru-ru
Slovakian	sk-sk
Spanish	es-es
Spanish—Argentina	es-ar
Spanish—Chile	es-cl
Spanish—Colombia	es-co
Spanish—Mexico	es-mx
Spanish—Peru	es-pe
Spanish—American	es-us
Swedish	sv-se
Thai	th-th
Turkish	tr-tr
Vietnamese	vi-vn

Activating a Profile

Important

You must complete the required settings in each of these sections before activating a profile:

- "Configuring Payment Methods"
- "Creating a Security Key"
- "Displaying a Response Page"

To activate a profile:

Step 1 On the Profile Settings page, click **Promote to Active**. The profile is now active and listed as an active profile on the Manage Profiles page.

Note

The All Profiles link appears on the Profile Settings page. Click **All Profiles** to view the Manage Profiles list. See "Updating a Secure Acceptance Profile," page 49.

Additional Options for a Profile

- Deactivate—deactivates the active profile. The profile is now listed in the inactive profile list. This option is available only for an active profile.
- Create Editable Version—duplicates the active profile and creates an editable version. The editable version is listed in the inactive profile list. This option is available only for an active profile.
- Promote to Active—activates the inactive profile. This option is available only for an inactive profile.

Sample Scripting Languages

Secure Acceptance Web/Mobile can support any dynamic scripting language that supports HMAC256 hashing algorithms.

Select to download the sample script for the scripting language that you use:

- JSP
- ASP.NET (C#)
- Ruby
- PHP
- Perl
- VB

Sample Transaction Process Using JSP

1 ***payment_form.jsp*** file—represents the customer's product selection on a web site. POST the fields to your server to sign and create the signature. The fields must be included in the **signed_field_names** field as a CSV list. Enter your access key and profile ID into their respective fields.

2 ***security.jsp*** file—security algorithm signs fields and creates a signature using the **signed_field_names** field. The security script must be modified to include the Secret Key that you generated on page 27. Enter your security key in the **SECRET_KEY** field.

The security algorithm in each security script sample is responsible for:

- Request authentication—the signature is generated on the merchant server by the keyed-hash message authentication code (HMAC) signing the request parameters using the shared secret key. This process is also carried out on the Secure Acceptance server, and the two signatures are compared for authenticity.

- Response authentication—the signature is generated on the Secure Acceptance server by HMAC signing the response parameters, using the shared secret key. This process is also carried out on the merchant server, and the two signatures are compared for authenticity.

3 ***payment_confirmation.jsp*** file—represents the customer order review page on a web site, prior to proceeding with making a payment. POST transaction to the Secure Acceptance endpoint (see "Endpoints and Transaction Types," page 47) and render the Secure Acceptance Web/Mobile checkout.

Endpoints and Transaction Types

Standard Transaction Endpoints	
Test Transactions	https://testsecureacceptance.cybersource.com/pay
Live Transactions	https://secureacceptance.cybersource.com/pay
Supported transaction types	■ authorization ■ authorization,create_payment_token ■ authorization,update_payment_token ■ sale ■ sale,create_payment_token ■ sale,update_payment_token
One-click Transaction Endpoints	
Test Transactions	https://testsecureacceptance.cybersource.com/oneclick/pay
Live Transactions	https://secureacceptance.cybersource.com/oneclick/pay
Supported transaction types	■ authorization ■ authorization,update_payment_token ■ sale ■ sale,update_payment_token
Visa Checkout Endpoints	
Test Transactions	https://testsecureacceptance.cybersource.com/pay
Live Transactions	https://secureacceptance.cybersource.com/pay
Supported transaction types	■ authorization ■ sale
Create Standalone Payment Token Endpoints	
Test Transactions	https://testsecureacceptance.cybersource.com/token/create
Live Transactions	https://secureacceptance.cybersource.com/token/create
Supported transaction type	create_payment_token
Update Payment Token Endpoints	
Test Transactions	https://testsecureacceptance.cybersource.com/token/update
Live Transactions	https://secureacceptance.cybersource.com/token/update
Supported transaction type	update_payment_token

iFrame Standard Transaction Endpoints (see "iFrame Implementation," page 148).	
Test Transactions	https://testsecureacceptance.cybersource.com/embedded/pay
Live Transactions	https://secureacceptance.cybersource.com/embedded/pay
Supported transaction type	■ authorization ■ authorization,create_payment_token ■ authorization,update_payment_token ■ sale ■ sale,create_payment_token ■ sale,update_payment_token
iFrame Create Payment Token Endpoints (see "iFrame Implementation," page 148).	
Test Transactions	https://testsecureacceptance.cybersource.com/embedded/token/create
Live Transactions	https://secureacceptance.cybersource.com/embedded/token/create
Supported transaction type	create_payment_token
iFrame Update Payment Token Endpoints (see "iFrame Implementation," page 148).	
Test Transactions	https://testsecureacceptance.cybersource.com/embedded/token/update
Live Transactions	https://secureacceptance.cybersource.com/embedded/token/update
Supported transaction type	update_payment_token

CHAPTER 3

Updating a Secure Acceptance Profile

Profile status can be active or inactive:

- Active: the live Secure Acceptance profile. This is your current profile, and it is read-only. You can have more than one active profile.
- Inactive: the version of a new profile before activation, or the editable version of an active profile. Update and activate this profile to replace the current active profile.

Important If you have multiple profiles the Manage Profiles page appears by default when you log in to the Business Center.

To update a profile:

Step 1 Log in to the Business Center:

- Live transactions: https://ebc.cybersource.com
- Test transactions: https://ebctest.cybersource.com

Step 2 In the left navigation panel, choose **Tools & Settings > Secure Acceptance > Profiles**.

Step 3 Check the active or inactive profile.

The options for an active profile are:

- Deactivate: deactivates the active profile. The profile is then listed in the inactive profile list.
- Edit: select edit and update the active profile. An editable version of the active profile appears in the inactive profile list. To activate this inactive profile, click **Promote to Active**.
- Copy: duplicates the active profile. The duplicate profile (editable version) is listed in the inactive profile list.

The options for an inactive profile are:

- Promote to Active: promotes the inactive profile to the active profile list. It replaces the current active profile, and it is removed from the inactive profile list.
- Delete: deletes the inactive profile.
- Copy: duplicates the inactive profile. The duplicate profile (editable version) is listed in the inactive profile list.


Note

You can also click the pencil icon to edit an inactive profile.

Step 4 Click **Continue**. The Profile Settings page appears.

Step 5 Update the inactive profile (editable version). See "Creating a Web/Mobile Profile," page 18.

Step 6 Activate the inactive profile. See "Activating a Profile," page 45**.**


Important

When you activate an inactive profile, it replaces the current active profile and is removed from the inactive profile list on the Manage Profiles page.

Step 7 Click **All Profiles** to view the active and inactive profiles you have created.


Important

If you have multiple profiles the Manage Profiles page appears by default when you log in to the Business Center and choose **Tools & Settings > Secure Acceptance > Profiles**.

CHAPTER 4

Creating a Payment Token

Standalone Payment Token

For a Credit Card Customer

To create a standalone payment token for a credit card customer:

Step 1 Include the appropriate endpoint that supports **create_payment_token**. See page 47.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of all request fields, see page 83.

```
reference_number=123456789
transaction_type=create_payment_token
currency=usd
locale=en
access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p3
profile_id=demoid
transaction_uuid=02815b4f08e56882751a043839b7b481
signed_date_time=2013-07-11T15:16:54Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 3 Depending on the payment settings you configured for Secure Acceptance Web/Mobile (see page 29), you can hide or pre-populate API fields when Secure Acceptance is rendered.

Important Include all optional request fields in the required **signed_field_names** field (recommended) or the **unsigned_field_names** field. The **signed_field_names** field is used to generate a signature that is used to verify the content of the transaction to prevent data tampering.

Example 1 Pre-Populated API Request Fields

```
payment_method=card
card_type=001
card_number=4111111111111111
card_expiry_date=12-2022
card_cvn=005
bill_to_forename=Joe
bill_to_surname=Smith
bill_to_email=joesmith@example.com
bill_to_address_line1=1 My Apartment
bill_to_address_city=Mountain View
bill_to_address_postal_code=94043
bill_to_address_state=CA
bill_to_address_country=US
```

Below are the transaction reply fields (see page 109 for detailed descriptions of all reply fields). It includes the new payment token value.

```
req_reference_number=123456789
req_transaction_type=create_payment_token
req_locale=en
req_payment_method=card
req_card_type=001
req_card_number=xxxxxxxxxxxx1111
req_card_expiry_date=12-2022
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=joesmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_city=Mountain View
req_bill_to_address_postal_code=94043
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p3
req_profile_id=demoid
req_transaction_uuid=02815b4f08e56882751a043839b7b481
signed_date_time=2013-07-11T15:16:54Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
decision=ACCEPT
reason_code=100
transaction_id=3735553783662130706689
payment_token=3529893314302230706689
```

For an eCheck Customer

To create a standalone payment token for an eCheck customer:

Step 1 Include the appropriate endpoint that supports **create_payment_token**. See page 47.

Step 2 Include the following required fields on your payment form. For detailed descriptions of all request fields, see page 83.

```
access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p1
profile_id=demoid
transaction_type=create_payment_token
currency=USD
locale=en
reference_number=173056001373554202429468 3
transaction_uuid=02815b4f08e56882751a043839b7b481
signed_date_time=2013-07-11T15:16:54Z
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
```

Step 3 Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), you can hide, pre-populate, or allow the customer to edit the API fields when Secure Acceptance is rendered.

Important Include all optional request fields in the required **signed_field_names** field (recommended) or the **unsigned_field_names** field. The **signed_field_names** field is used to generate a signature that is used to verify the content of the transaction to prevent data tampering.

Example 2 Pre-Populated API Request Fields

```
bill_to_forename=Joe
bill_to_surname=Smith
bill_to_email=joesmith@example.com
bill_to_address_line1=1 My Apartment
bill_to_address_state=CA
bill_to_address_country=US
payment_method=echeck
driver_license_state=NY
driver_license_number=34-78239-396
date_of_birth=19901001
echeck_account_type=c
company_tax_id=123456789

echeck_sec_code=WEB
echeck_account_number=452894100
echeck_routing_number=672302882
```

Below are the transaction reply fields (see page 109 for detailed descriptions of all reply fields).

```
req_bill_to_address_country=US
req_driver_license_state=NY
req_driver_license_number=xx-xxxxx-xxx
req_date_of_birth=19901001
decision=ACCEPT
req_bill_to_address_state=CA
signed_field_names=comma separated list of signed fields
req_payment_method=echeck
req_transaction_type=create_payment_token
req_echeck_account_type=c
signature=NuxlJilx5YbvKoXlt0baB5hUj5gk4+OozqJnyVF390s=
req_locale=en
reason_code=100
req_bill_to_address_postal_code=94043
req_echeck_account_number=xxxxx4100
req_bill_to_address_line1=1 My Apartment
req_echeck_sec_code=WEB
req_bill_to_address_city=San Francisco
signed_date_time=2013-07-11T15:11:41Z
req_currency=USD
req_reference_number=173056001373554202429468 3
req_echeck_routing_number=xxxxx2882
transaction_id=3735553783662130706689
req_amount=100.00
req_profile_id=demoid
req_company_tax_id=123456789
req_transaction_uuid=38f2efe650ea699597d325ecd7432b1c
payment_token=3529893314302130706689
req_bill_to_surname=Soap
req_bill_to_forename=Joe
req_bill_to_email=joesoap@yahoo.com
req_access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p1
```

Payment Token for Recurring Payments

You must specify the amount and frequency of each payment and the start date for processing recurring payments. CyberSource creates a schedule based on this information and automatically bills the customer according to the schedule.

To create a payment token for a recurring payment:

Step 1 Include the appropriate endpoint that supports **authorization,create_payment_token** or **sale,create_payment_token**. See page 47.

Important The **amount** field is an optional field that indicates the setup fee for processing recurring payments. To charge this fee, include the **amount** field and ensure that the **transaction_type** field is set to **authorization,create_payment_token** or **sale,create_payment_token**.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of all request fields, see page 83.

Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), you can hide, pre-populate, or allow the customer to edit the API fields when Secure Acceptance is rendered.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=demoid
transaction_type=authorization,create_payment_token
locale=en
currency=USD
amount=5.00
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Important Include all optional request fields in the required **signed_field_names** field (recommended) or the **unsigned_field_names** field. The **signed_field_names** field is used to generate a signature that is used to verify the content of the transaction to prevent data tampering.

Example 3 Pre-Populated API Request Fields

```
bill_to_forename=Joe
bill_to_surname=Smith
bill_to_email=joesmith@example.com
bill_to_address_line1=1 My Apartment
bill_to_address_state=CA
bill_to_address_country=US
recurring_frequency=monthly
recurring_amount=25.00
payment_method=card
```

Below are the transaction reply fields (see page 109 for detailed descriptions of all reply fields).

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization,create_payment_token
req_reference_number=1350029885978
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_payment_token_comments=These are my token comments
req_payment_token_title=This is my payment token title
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_recurring_start_date=20130125
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
req_card_expiry_date=11-2020
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
```

```
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=3427075830000181552556
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

Payment Token for Installment Payments

You must specify the number of payments, the amount and frequency of each payment, and the start date for processing the payments. CyberSource creates a schedule based on this information and automatically bills the customer according to the schedule.

To create a payment token for an installment payment:

Step 1 Include the appropriate endpoint that supports **authorization,create_payment_token** or **sale,create_payment_token**. See page 47.

Important The **amount** field is an optional field that indicates the setup fee for processing recurring payments. To charge this fee, include the **amount** field and ensure the **transaction_type** field is set to **authorization,create_payment_token** or **sale,create_payment_token**.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of all request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=demoid
transaction_type=authorization,create_payment_token
locale=en
currency=USD
amount=5.00
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 3 Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), you can hide, pre-populate, or allow the customer to edit the API fields when Secure Acceptance is rendered.

Important Include all optional request fields in the required **signed_field_names** field (recommended) or the **unsigned_field_names** field. The **signed_field_names** field is used to generate a signature that is used to verify the content of the transaction to prevent data tampering.

Example 4 Pre-Populated API Request Fields

```
bill_to_forename=Joe
bill_to_surname=Smith
bill_to_email=joesmith@example.com
bill_to_address_line1=1 My Apartment
bill_to_address_state=CA
bill_to_address_country=US
recurring_frequency=monthly
recurring_number_of_installments=6
recurring_amount=25.00
payment_method=card
```

Below are the transaction reply fields (see page 109 for detailed descriptions of all reply fields).

```
transaction_id=3500311655560181552946
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization,create_payment_token
req_reference_number=1350029885978
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_payment_token_comments=These are my token comments
req_payment_token_title=This is my payment token title
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_recurring_start_date=20130125
req_recurring_number_of_installments=6
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
```

```
req_card_expiry_date=11-2020
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=34270758300000181552556
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

CHAPTER 5

Updating Payment Token Details

For a Credit Card Customer


Important

You must configure the billing, shipping, and payment details to allow a customer to edit their details on the Order Review page. See "Customizing Order Review Details," page 33.

To update payment token details for a credit card customer:

Step 1 Include the appropriate endpoint that supports **update_payment_token**. See page 47. This transaction type updates the token without processing a transaction.

Or, include the appropriate endpoint that supports **authorization,update_payment_token** (updates the token and authorizes the transaction) or **sale,update_payment_token** (updates the token and processes the transaction). See page 47.

Step 2 Include the **allow_payment_token_update** field and set to **true**.

Step 3 Include the following required API fields on your payment form. For detailed descriptions of required or optional request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=demoid
reference_number=1350029885978
payment_token=342707583000018155256
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 4 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information. The customer is directed to the Order Review page.

Step 5 The customer clicks **Edit Address** or **Edit Details** to return to the relevant checkout page.

Step 6 The customer updates their details and clicks **Next**. The Order Review page appears.

Step 7 The customer clicks **Pay** to confirm the transaction.

Below is an example card update reply. It includes the new payment token.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization,update_payment_token
req_reference_number=1350029885978
req_amount=100.00
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx1111
req_card_type=001
req_card_expiry_date=12-2022
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=342707583000018155255 6
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

For detailed descriptions of all reply fields, see page 109.

For an eCheck Customer

Important You must configure the billing, shipping, and payment details to allow a customer to edit their details on the Order Review page. See "Customizing Order Review Details," page 33.

To update payment token details for an eCheck customer:

Step 1 Include the appropriate endpoint that supports **update_payment_token**. See page 47. This transaction type updates the token without processing a transaction.

Or, include the appropriate endpoint that supports **sale,update_payment_token** (updates the token and processes the transaction). See page 47.

Step 2 Include the **allow_payment_token_update** field and set to **true**.

Step 3 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=demoid
reference_number=1350029885978
payment_token=342707583000018155255 6
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 4 The **payment_token** field identifies the eCheck account and retrieves the associated billing, shipping, and payment information. The customer is directed to the Order Review page.

Step 5 The customer clicks **Edit Address** or **Edit Details** to return to the relevant checkout page.

Step 6 The customer updates their details and clicks **Next**. The Order Review page appears.

Step 7 The customer clicks **Pay** to confirm the transaction.

Below is an example eCheck update reply. It includes the new payment token.

```
req_bill_to_address_country=US
req_driver_license_state=NY
req_driver_license_number=xx-xxxxx-xxx
req_date_of_birth=19901001
decision=ACCEPT
req_bill_to_address_state=CA
signed_field_names=comma separated list of signed fields
req_payment_method=echeck
req_transaction_type=sale,update_payment_token
req_echeck_account_type=c
signature=NuxlJilx5YbvKoXlt0baB5hUj5gk4+OozqJnyVF390s=
req_locale=en
reason_code=100
req_bill_to_address_postal_code=94043
req_echeck_account_number=xxxxx4100
req_bill_to_address_line1=1 My Apartment
req_echeck_sec_code=WEB
req_bill_to_address_city=San Francisco
signed_date_time=2013-07-11T15:11:41Z
req_currency=USD
req_reference_number=173056001373554202429468 3
req_echeck_routing_number=xxxxx2882
transaction_id=3735553783662130706689
req_amount=100.00
req_profile_id=demoid
req_company_tax_id=123456789
req_transaction_uuid=38f2efe650ea699597d325ecd7432b1c
payment_token=3529893314302130706689
req_bill_to_surname=Soap
req_bill_to_forename=Joe
req_bill_to_email=joesoap@yahoo.com
req_access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p1
```

For detailed descriptions of all reply fields, see page 109.

Payment Token for Recurring Payments

Important You must configure the billing, shipping, and payment details to allow a customer to edit their details on the Order Review page. See "Customizing Order Review Details," page 33.

To update payment token details for a recurring payment:

Step 1 Include the appropriate endpoint that supports **update_payment_token**. See page 47. This transaction type updates the token without processing a transaction.

Or, include the appropriate endpoint that supports **authorization,update_payment_token** (updates the token and authorizes the transaction) or **sale,update_payment_token** (updates the token and processes the on-demand transaction). See page 47.

Step 2 Include the **allow_payment_token_update** field and set to **true**.

Step 3 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=HPA0002
reference_number=1350029885978
payment_token=342707583000018155255 6
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 4 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information. The customer is directed to the Order Review page.

Step 5 The customer clicks **Edit Address** or **Edit Details** to return to the relevant checkout page.

Step 6 The customer updates their details and clicks **Next**. The Order Review page appears.

Step 7 The customer clicks **Pay** to confirm the transaction.

Below is an example recurring billing update reply. It includes the new payment token value.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization,update_payment_token
req_reference_number=1350029885978
req_tax_amount=2.50
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_recurring_start_date=20130125
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=joesmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx1111
req_card_type=001
req_card_expiry_date=12-2022
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=673907583029018155672 3
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

For detailed descriptions of all request and reply fields, see page 109.

Payment Token for Installment Payments

Important You must configure the billing, shipping, and payment details to allow a customer to edit their details on the Order Review page. See "Customizing Order Review Details," page 33.

To update payment token details for an installment subscription:

Step 1 Include the appropriate endpoint that supports **update_payment_token**. See page 47. This transaction type updates the token without processing a transaction.

Or, include the appropriate endpoint that supports **authorization,update_payment_token** (updates the token and authorizes the transaction) or **sale,update_payment_token** (updates the token and processes the on-demand transaction). See page 47.

Step 2 Include the **allow_payment_token_update** field and set to **true**.

Step 3 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=HPA0002
reference_number=1350029885978
payment_token=342707583000018155255 6
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 4 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information. The customer is directed to the Order Review page.

Step 5 The customer clicks **Edit Address** or **Edit Details** to return to the relevant checkout page.

Step 6 The customer updates their details and clicks **Next**. The Order Review page appears.

Step 7 The customer clicks **Pay** to confirm the transaction.

Below is an example installment payment update reply. It includes the new payment token value.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization,update_payment_token
req_reference_number=1350029885978
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_payment_token_comments=These are my token comments
req_payment_token_title=This is my payment token title
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_recurring_start_date=20130125
req_recurring_number_of_installments=6
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx1111
req_card_type=001
req_card_expiry_date=12-2022
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=673907583029018155672 3
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00
```

For detailed descriptions of all request and reply fields, see page 109.

CHAPTER 6

Processing Transactions Using a Payment Token

For one-click Payments

To process one-click payments:

Step 1 Include the appropriate one-click endpoint that supports **authorization** or **sale**. See page 47.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of all request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=HPA0002
reference_number=1350029885978
payment_token=342707583000018155255 6
transaction_type=authorization
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 3 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information.

Step 4 The customer is directed to the Order Review page. Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), the customer can view or update billing, shipping, and payment details (see page 60).

Step 5 The customer clicks **Pay**.

Below is the transaction reply.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=HPA0002
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization
req_reference_number=1350029885978
req_amount=100.00
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
req_card_expiry_date=11-2020
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=342707583000018155255 6
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
req_amount=100.00
req_tax_amount=15.00
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
req_card_expiry_date=11-2020
reason_code=100
```

```
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=3427075830000181552556
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

For detailed descriptions of all reply fields, see page 109.

For eCheck Payments

To process eCheck payments:

Step 1 Include the appropriate endpoint that supports the **transaction_type** sale. See page 47.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=e2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p3
profile_id=ECP0003
reference_number=184586401378306046857361 6
transaction_type=sale
currency=USD
amount=100.00
locale=en
payment_token=3644783643210170561946
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

Step 3 The **payment_token** field identifies the eCheck account and retrieves the associated billing, shipping, and payment information.

Step 4 The customer is directed to the Order Review page. Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29) the customer can view or update billing, shipping, and payment details (see page 70).

Step 5 The customer clicks **Pay**.

Below is the transaction reply.

```
req_bill_to_address_country=US
req_driver_license_state=NY
req_driver_license_number=xx-xxxxx-xxx
req_date_of_birth=19901001
decision=ACCEPT
req_bill_to_address_state=CA
signed_field_names=comma separated list of signed fields
req_payment_method=echeck
req_transaction_type=sale
req_echeck_account_type=c
signature=ZUk7d99c/yb+kidvVUbz10JtykmjOt8LMPgkllRaZR8=
req_locale=en
reason_code=100
req_echeck_account_number=xxxxx4100
req_bill_to_address_line1=1 My Apartment
req_echeck_sec_code=WEB
signed_date_time=2013-06-12T09:59:50Z
req_currency=USD
req_reference_number=77353001371031080772693
req_echeck_routing_number=xxxxx2882
transaction_id=3710311877042130706689
req_amount=100.00
message=Request was processed successfully.
echeck_debit_ref_no=1
echeck_debit_submit_time=2013-03-25T104341Z
req_profile_id=demoid
req_company_tax_id=123456789
req_transaction_uuid=bdc596506c2677b79133c9705e5cf77c
req_bill_to_surname=Smith
req_bill_to_forename=Joe
req_bill_to_email=jsmith@example.com
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
```

For detailed descriptions of all reply fields, see page 109.

For Recurring Payments

To process recurring payments:

Step 1 Include the appropriate endpoint that supports the **transaction_type** authorization or sale. See page 47.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=HPA0002
reference_number=1350029885978
payment_token=3427075830000181552556
transaction_type=authorization
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 3 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information.

Step 4 The customer is directed to the Order Review page. Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), the customer can view or update billing, shipping, and payment details (see page 64).

Step 5 The customer clicks **Pay**.

Below is the transaction reply.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization
req_reference_number=1350029885978
req_tax_amount=2.50
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_amount=100
req_recurring_start_date=20130125
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=joesmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
req_card_expiry_date=11-2020
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=342707583000018155255 6
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

For detailed descriptions of all reply fields, see page 109.

For Installment Payments

To process installment payments:

Step 1 Include the appropriate endpoint that supports the **transaction_type** authorization or sale. See page 47.

Step 2 Include the following required API fields on your payment form. For detailed descriptions of required request fields, see page 83.

```
access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
profile_id=demoid
reference_number=1350029885978
payment_token=3427075830000181552556
transaction_type=authorization
amount=100.00
currency=USD
locale=en
transaction_uuid=fcfc212e92d23be881d1299ef3c3b314
signed_date_time=2013-01-17T10:46:39Z
signed_field_names=comma separated list of signed fields
unsigned_field_names=comma separated list of unsigned fields
signature=WrXOhTzhBjYMZROwiCug2My3jiZHOqATimcz5EBA07M=
```

Step 3 The **payment_token** field identifies the card and retrieves the associated billing, shipping, and payment information.

Step 4 The customer is directed to the Order Review page. Depending on the settings you configured for Secure Acceptance Web/Mobile (see page 29), the customer can view or update billing, shipping, and payment details (see page 66).

Step 5 The customer clicks **Pay**.

Below is the transaction reply.

```
transaction_id=350031165556018155294 6
decision=ACCEPT
message=Request was processed successfully.
req_access_key=a2b0c0d0e0f0g0h0i0j0k0l0m0n0o0p2
req_profile_id=demoid
req_transaction_uuid=55d895790bc4c8a0f4464f9426ba3b79
req_transaction_type=authorization
req_reference_number=1350029885978
req_tax_amount=2.50
req_currency=USD
req_locale=en
req_payment_method=card
req_consumer_id=1239874561
req_recurring_frequency=monthly
req_recurring_amount=25.00
req_recurring_start_date=20130125
req_recurring_number_of_installments=6
req_bill_to_forename=Joe
req_bill_to_surname=Smith
req_bill_to_email=jsmith@example.com
req_bill_to_address_line1=1 My Apartment
req_bill_to_address_state=CA
req_bill_to_address_country=US
req_card_number=xxxxxxxxxxxx4242
req_card_type=001
req_card_expiry_date=11-2020
reason_code=100
auth_avs_code=U
auth_avs_code_raw=00
auth_response=0
auth_amount=100.00
auth_time==2012-08-14T134608Z
payment_token=342707583000018155255 6
signed_field_names=comma separated list of signed fields
signed_date_time=2012-10-12T08:39:25Z
signature=jMeHnWRKwU3xtT02j2ufRibfFpbdjUSiuWGT9hnNm00=
```

For detailed descriptions of all reply fields, see page 109.

Viewing Transactions in the Business Center

To view a transaction in the Business Center:

Step 1 Log in to the Business Center:

- Live transactions: https://ebc.cybersource.com
- Test transactions: https://ebctest.cybersource.com

Step 2 In the left navigation panel, choose **Transaction Search > Secure Acceptance Search**. The Secure Acceptance Search page appears. The search options are:

- Account suffix
- Cardholder's surname
- Merchant reference number
- Request ID

Step 3 Select the date range for your search. The dates can range from the current day to a maximum of 6 months past.

Step 4 Select the number of results to be displayed, from 10 to 100 transactions per page.

Step 5 Click **Search**. The Secure Acceptance Transaction Search Results page appears.

Important If a transaction has missing or invalid data, it is displayed in the Secure Acceptance Transaction Search Results page without a request ID link.

Step 6 The additional search options for each transaction are:

- Click the **request ID** link of the transaction. The Transaction Search Details page appears.
- Click the magnifying glass icon in the Log column for each transaction. The Secure Acceptance Transaction Search Details page appears. The search results are:
  - Summary information—includes the merchant ID, request ID, profile ID, the transaction decision, and the message for the transaction.
  - Request log—includes all the request API fields for the transaction.
  - Reply log—includes all the reply API fields for the transaction.

CHAPTER 7

Using Decision Manager

Important Contact CyberSource Customer Support to enable the Decision Manager verbose data mode for your merchant account and for detailed information regarding the device fingerprint.

Decision Manager is a hosted fraud management tool that enables you to identify legitimate orders quickly and that reduces the need to manually intervene in your order review process. You can accurately identify and review potentially risky transactions while minimizing the rejection of valid orders. With Secure Acceptance, you can use Decision Manager to screen orders containing travel data. Include the complete route or the individual legs of the trip, or both. If you include both, the value for the complete route is used.

Decision Manager also obtains data about the geographical location of a customer by linking the IP address extracted from the customer's browser to the country and the credit card. Add the customer's IP address to the **customer_ip_address** field and include it in the request.

Verbose mode returns detailed information about the order, and it returns the decision of each rule that the order triggered. Rules that are evaluated as true are returned with the appropriate results and field names, but rules that are evaluated as false are not returned.

The optional decision manager fields are:

- consumer_id
- complete_route
- customer_cookies_accepted
- customer_gift_wrap
- customer_ip_address
- departure_time
- date_of_birth
- device_fingerprint_id—the CyberSource-generated device fingerprint ID overrides the merchant-generated device fingerprint ID. See page 90.
- journey_leg#_orig
- journey_leg#_dest
- journey_type

- merchant_defined_data#
- passenger_firstname
- passenger_email
- passenger_id
- passenger_lastname
- passenger_status
- passenger_type
- returns_accepted

For detailed descriptions of all request fields, see page 83. For detailed descriptions of all the Decision Manager reply fields, see *Decision Manager Developer Guide Using the SCMP API* (PDF | HTML).

CHAPTER 8

Testing and Viewing Transactions

Important You must create a profile in both the test and live versions of Secure Acceptance. You cannot copy a profile from the test version to the live version. You must recreate the profile.

Testing Transactions

To test Secure Acceptance transactions:

Step 1 Log in to the Test Business Center: https://ebctest.cybersource.com

Step 2 Create a Secure Acceptance profile. See "Creating a Web/Mobile Profile," page 18.

Step 3 Integrate with Secure Acceptance. See page 46page 46.

Important Include the test transactions endpoint in your HTML form. See page 46.

Step 4 You may use the following test credit card numbers for transactions:

Credit Card Type	Test Account Number
Visa	4111111111111111
MasterCard	5555555555554444
American Express	378282246310005
Discover	6011111111111117
JCB	3566111111111113
Diners Club	38000000000006
Maestro International (16 digits)	6000340000009859
Maestro Domestic (16 digits)	6759180000005546

To simulate processor-specific error messages, choose your payment processor here:
http://www.cybersource.com/developers/test_and_manage/testing/legacy_scmp_api/

Viewing Transactions in the Business Center

To view a transaction in the Business Center:

Step 1 Log in to the Business Center:

- Live transactions: https://ebc.cybersource.com
- Test transactions: https://ebctest.cybersource.com

Step 2 In the left navigation panel, choose **Transaction Search > Secure Acceptance Search**. The Secure Acceptance Search page appears. The search options are:

- Account suffix
- Cardholder's surname
- Merchant reference number
- Request ID

Step 3 Select the date range for your search. The dates can range from the current day to a maximum of 6 months past.

Step 4 Select the number of results to be displayed, from 10 to 100 transactions per page.

Step 5 Click **Search**. The Secure Acceptance Transaction Search Results page appears.

Important If a transaction has missing or invalid data, it is displayed in the Secure Acceptance Transaction Search Results page without a request ID link.

Step 6 The additional search options for each transaction are:

- Click the **request ID** link of the transaction. The Transaction Search Details page appears.
- Click the magnifying glass icon in the Log column for each transaction. The Secure Acceptance Transaction Search Details page appears. The search results are:
  - Summary information—includes the merchant ID, request ID, profile ID, the transaction decision, and the message for the transaction.

- Request log—includes all the request API fields for the transaction.
- Reply log—includes all the reply API fields for the transaction.

APPENDIX A

API Fields

Data Type Definitions

Data Type	Permitted Characters and Formats
Alpha	Any letter from any language
AlphaNumeric	Alpha with any numeric character in any script
AlphaNumericPunctuation	Alphanumeric including ! "#$%&'()*+,-./:;=?@^_~
Amount	0123456789 including a decimal point (.)
ASCIIAlphaNumericPunctuation	Any ASCII alphanumeric character including ! "#$%&'()*+,-.\/:;=?@^_~
Date (a)	MM-YYYY
Date (b)	YYYYMMDD
Date (c)	yyyy-MM-dd HH:mm z yyyy-MM-dd hh:mm a z yyyy-MM-dd hh:mma z
Email	Valid email address including |
Enumerated String	Comma-separated alphanumeric string
IP	Valid IP address
ISO 8601 Date	2013-09-17T08:17:07Z
Locale	[a-z] including a hyphen (-)
Numeric	0123456789
Phone	( ),+-.*#xX1234567890
URL	Valid URL (http or https)

Important CyberSource recommends that you not include URL encoded characters in any request field prior to generating a signature.

Request Fields

Important CyberSource recommends that all request fields should be signed to prevent data tampering, with the exception of the **card_number** field, the **card_cvn** field and the **signature** field.

Table 6 Request Fields

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
access_key	Required for authentication with Secure Acceptance. See "Creating a Security Key," page 27. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	Alphanumeric String (32)
allow_payment_token_update	Indicates whether the customer can update the billing, shipping, and payment information on the order review page. This field can contain one of the following values: ■ true: customer can update details. ■ false: customer cannot update details.	update_payment_token (R)	Enumerated String String (5)
amount	Total amount for the order. Must be greater than or equal to zero and must equal the total amount of each line item including the tax amount.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Amount String (15)
bill_payment	Flag that indicates a payment for a bill or for an existing contractual loan.Visa provides a Bill Payment program that enables customers to use their Visa cards to pay their bills. Possible values: ■ true: bill payment or loan payment. ■ false (default): not a bill payment or loan payment.	This field is optional.	Enumerated String String (5)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
bill_to_address_city	City in the billing address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	AlphaNumericPunctuation Atos: String (32) All other processors: String (50)
bill_to_address_country	Country code for the billing address. Use the two-character ISO country codes. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Alpha String (2)
bill_to_address_line1	First line of the billing address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	AlphaNumericPunctuation Atos: String (29) CyberSource through VisaNet: String (40) Litle: String (35) Moneris: String (50) All other processors: String (60)
bill_to_address_line2	Second line of the billing address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	This field is optional.	AlphaNumericPunctuation Atos: String (29) CyberSource through VisaNet: String (40) Litle: String (35) Moneris: String (50) All other processors: String (60)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
bill_to_address_postal_code	Postal code for the billing address. **Note** This field is required if **bill_to_address_country** is US or CA. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	See description.	AlphaNumericPunctuation CyberSource through VisaNet: String (9) All other processors: String (10)
bill_to_address_state	State or province in the billing address. Use the two-character ISO state and province code. **Note** This field is required if **bill_to_address_country** is US or CA. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	See description.	AlphaNumericPunctuation String (2 for U.S. and Canada, otherwise 60) CyberSource through VisaNet: String (20)
bill_to_company_name	Name of the customer's company. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	This field is optional.	AlphaNumericPunctuation String (40)
bill_to_email	Customer email address, including the full domain name. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Email String (255)
bill_to_forename	Customer first name. This name must be the same as the name on the card. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	AlphaNumericPunctuation String (60)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
bill_to_phone	Customer phone number. CyberSource recommends that you include the country code if the order is from outside the U.S. **Note** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30. **Important** This field is optional for card payments. For eCheck payments this field is required if your processor is CyberSource ACH Service or Telecheck.	See description.	Phone String (15) String (10) if using Telecheck for echeck payments.
bill_to_surname	Customer last name. This name must be the same as the name on the card. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Billing Information Fields," page 30.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	AlphaNumericPunctuation String (60)
card_cvn	Card verification number. This field can be configured as required or optional.	See description.	Numeric String (4)
card_expiry_date	Card expiration date. Format: MM-YYYY	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Date (a) String (7)
card_number	Card number. **Important** Use only numeric values. Be sure to include valid and well-formed data for this field.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Numeric String (20)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
card_type	Type of card to authorize. Use one of these values: ■ 001: Visa ■ 002: MasterCard ■ 003: American Express ■ 004: Discover ■ 005: Diners Club ■ 006: Carte Blanche ■ 007: JCB ■ 014: EnRoute ■ 021: JAL ■ 024: Maestro UK Domestic ■ 031: Delta ■ 033: Visa Electron ■ 034: Dankort ■ 036: Carte Bleue ■ 037: Carta Si ■ 042: Maestro International ■ 043: GE Money UK card ■ 050: Hipercard (sale only) ■ 054: Elo	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Enumerated String String (3)
company_tax_id	Company's tax identifier. **Note** Contact your TeleCheck representative to find out whether this field is required or optional. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (See description) ■ create_payment_token (See description) ■ sale,create_payment_token (See description) ■ update_payment_token (See description)	AlphaNumericPunctuation String (9)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
complete_route	Concatenation of individual travel legs in the format for example: SFO-JFK:JFK-LHR:LHR-CDG. For a complete list of airport codes, see IATA's City Code Directory. In your request, send either the complete route or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the value of **complete_route** takes precedence over that of the **journey_leg#** fields.	This field is optional. See "Using Decision Manager," page 77.	AlphaNumericPunctuation String (255)
conditions_accepted	Indicates whether the customer accepted the service fee amount. Possible values: ■ false: the customer did not accept. ■ true: the customer did accept.	This is a required field if service fee is enabled for the profile. See "Enabling the Service Fee," page 26.	Enumerated String String (5)
consumer_id	Identifier for the customer's account. This field is defined when you create a subscription.	■ create_payment_token (O) ■ authorization,create_payment_token (O) ■ sale,create_payment_token (O) ■ update_payment_token (O)	AlphaNumericPunctuation String (50)
currency	Currency used for the order. For the possible values, see the ISO currency codes. **Important** To prevent data tampering CyberSource recommends signing this field.	■ create_payment_token (R) ■ authorization or sale (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Alpha String (3)
customer_cookies_accepted	Indicates whether the customer's browser accepts cookies. This field can contain one of the following values: ■ true: customer browser accepts cookies. ■ false: customer browser does not accept cookies.	This field is optional. See "Using Decision Manager," page 77.	Enumerated String String (5)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
customer_gift_wrap	Indicates whether the customer requested gift wrapping for this purchase. This field can contain one of the following values: ■ true: customer requested gift wrapping. ■ false: customer did not request gift wrapping.	This field is optional. See "Using Decision Manager," page 77.	Enumerated String String (5)
customer_ip_ address	Customer's IP address reported by your web server via socket information.	This field is optional. See "Using Decision Manager," page 77.	IP String (15)
date_of_birth	Date of birth of the customer. Use the format: YYYYMMDD. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	This is an optional field.	Date (b) String (8)
debt_indicator	Flag that indicates a payment for an existing contractual loan under the VISA Debt Repayment program. Contact your processor for details and requirements. Possible formats: ■ false (default): not a loan payment ■ true: loan payment	This field is optional.	Enumerated String String (5)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
departure_time	Departure date and time of the first leg of the trip. Use one of the following formats: ■ yyyy-MM-dd HH:mm z ■ yyyy-MM-dd hh:mm a z ■ yyyy-MM-dd hh:mma z ■ HH = 24-hour format ■ hh = 12-hour format ■ a = am or pm (case insensitive) ■ z = time zone of the departing flight. **Example** ■ 2014-01-20 11:30 GMT ■ 2014-01-20 11:30 PM GMT ■ 2014-01-20 11:30pm GMT	This field is optional. See "Using Decision Manager," page 77.	Date (c) DateTime (29)
device_fingerprint_id	Field that contains the session ID for the fingerprint. The string can contain uppercase and lowercase letters, digits, and these special characters: hyphen (-) and underscore (_) However, do not use the same uppercase and lowercase letters to indicate different session IDs. The session ID must be unique for each merchant ID. You can use any string that you are already generating, such as an order number or web session ID. **Important** The CyberSource-generated device fingerprint ID overrides the merchant-generated device fingerprint ID. See skip_decision_manager, page 107.	This field is optional. See "Using Decision Manager," page 77.	AlphaNumericPunctuation String (88)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
driver_license_ number	Driver's license number of the customer. **Note** Contact your TeleCheck representative to find out whether this field is required or optional. If you include this field in your request then you must also include the **driver_ license_state** field. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (See description) ■ create_payment_token (See description) ■ sale,create_payment_token (See description) ■ update_payment_token (See description)	AlphaNumeric String (30)
driver_license_state	State or province where the customer's driver's license was issued. Use the two-character *State, Province, and Territory Codes for the United States and Canada*. **Note** Contact your TeleCheck representative to find out whether this field is required or optional. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (See description) ■ create_payment_token (See description) ■ sale,create_payment_token (See description) ■ update_payment_token (See description)	Alpha String (2)
e_commerce_ indicator	The commerce indicator for the transaction type. Value: install **Note** This field is required only for installment payments using the CyberSource Latin American Processing connection.	■ authorization (See description)	String (13)
echeck_account_ number	Account number. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (R) ■ create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Numeric Non-negative integer (17)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
echeck_account_type	Account type. Possible values: ■ C: checking ■ S: savings (USD only) ■ X: corporate checking (USD only) **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (R) ■ create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Enumerated String String (1)
echeck_check_number	Check number. **Note** If your payment processor is TeleCheck we recommend that you include this field. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (See description) ■ create_payment_token (See description) ■ sale,create_payment_token (See description) ■ update_payment_token (See description)	Numeric Integer (8)
echeck_effective_date	Pre-post date for the transaction. This date must be within 45 days of the current date. Use the format: MMDDYYYY	■ sale (O) ■ sale,create_payment_token (O)	Date (b) String (8)
echeck_routing_number	Bank routing number. This is also called the transit number. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying eCheck Information Fields," page 32.	■ sale (R) ■ create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Numeric Non-negative integer (9)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
echeck_sec_code	**Note** If you payment processor is TeleCheck then this field is required. Possible values: ■ CCD: Corporate cash disbursement—charge or credit against a business checking account. You can use one-time or recurring CCD transactions to transfer funds to or from a corporate entity. A standing authorization is required for recurring transactions. ■ PPD: Prearranged payment and deposit entry—charge or credit against a personal checking or savings account. You can originate a PPD entry only when the payment and deposit terms between you and the customer are prearranged. A written authorization from the customer is required for one-time transactions and a written standing authorization is required for recurring transactions. ■ TEL: Telephone-initiated entry—one-time charge against a personal checking or savings account. You can originate a TEL entry only when there is a business relationship between you and the customer or when the customer initiates a telephone call to you. For a TEL entry, you must obtain an authorization from the customer over the telephone. ■ WEB: Internet-initiated entry—charge against a personal checking or savings account. You can originate a one-time or recurring WEB entry when the customer initiates the transaction over the Internet. You must obtain an authorization from the customer over the Internet.	■ sale (See description) ■ create_payment_token (See description) ■ sale,create_payment_token (See description) ■ update_payment_token (See description)	Enumerated String String (3)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ignore_avs	Ignore the results of AVS verification. Possible values: ■ true ■ false **Important** To prevent data tampering CyberSource recommends signing this field.	This field is optional.	Enumerated String String (5)
ignore_cvn	Ignore the results of CVN verification. Possible values: ■ true ■ false **Important** To prevent data tampering CyberSource recommends signing this field.	This field is optional.	Enumerated String String (5)
installment_amount	Amount for the current installment payment. **Note** This field is required only for installment payments using the CyberSource Latin American Processing or CyberSource through VisaNet connections.	authorization (See description)	Amount (12)
installment_ frequency	Frequency of the installment payments. Possible values: ■ B: Biweekly ■ M: Monthly ■ W: Weekly **Note** This field is supported only for the CyberSource through VisaNet connection.	authorization (See description)	AlphaNumeric (2)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
installment_plan_type	Flag that indicates the type of funding for the installment plan associated with the payment. Possible values: ■ 1: Merchant-funded installment plan ■ 2: Issuer-funded installment plan If you do not include this field in the request, CyberSource uses the value that is in your CyberSource account. To change this value contact CyberSource Customer Service. ***CyberSource through VisaNet*** American Express-defined code that indicates the type of installment plan for this transaction. Contact American Express for: ■ Information about the types of installment plans that American Express provides ■ Values for this field	authorization (See description)	CyberSource Latin American Processing: String (1) CyberSource through VisaNet: String (2)
installment_sequence	Installment number when making payments in installments. Used along with **installment_total_count** to keep track of which payment is being processed. For example, the second of five payments would be passed to CyberSource as **installment_sequence** = 2 and **installment_total_count** = 5. **Note** This field is required only for installment payments using the CyberSource through VisaNet connection.	authorization (See description)	Integer (2)
installment_total_count	Total number of installment payments as part of an authorization. Possible values: 1 to 99 **Note** This field is required only for installment payments using CyberSource Latin American Processing or CyberSource through VisaNet connections.	authorization (See description)	Numeric String (2)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_code	Type of product. # can range from 0 to 199.	This field is optional. If you include this field, you must also include the **line_item_count** field.	AlphaNumericPunctuation String (255)
item_#_name	Name of the item. # can range from 0 to 199. **Note** This field is required when the **item_#_code** value is not default or relating to shipping or handling.	See description. If you include this field, you must also include the **line_item_count** field.	AlphaNumericPunctuation String (255)
item_#_quantity	Quantity of line items. The default value is 1. Required field if one of the following product codes is used: ■ adult_content ■ coupon ■ electronic_good ■ electronic_software ■ gift_certificate ■ service ■ subscription # can range from 1 to 199. **Note** This field is required when the **item_#_code** value is not default or relating to shipping or handling.	See description. If you include this field, you must also include the **line_item_count** field.	Numeric String (10)
item_#_sku	Identification code for the product. Required field if one of the following product codes is used: ■ adult_content ■ coupon ■ electronic_good ■ electronic_software ■ gift_certificate ■ service ■ subscription # can range from 0 to 199.	See description. If you include this field, you must also include the **line_item_count** field.	AlphaNumericPunctuation String (255)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
item_#_tax_amount	Tax amount to apply to the line item. # can range from 0 to 199. This value cannot be negative. The tax amount and the offer amount must be in the same currency.	This field is optional. If you include this field, you must also include the **line_item_count** field.	Amount String (15)
item_#_unit_price	Price of the line item. # can range from 0 to 199. This value cannot be negative. **Important** You must include either this field or the **amount** field in the request.	See description. If you include this field, you must also include the **line_item_count** field.	Amount String (15)
journey_leg#_dest	Airport code for the destination leg of the trip designated by the pound (#) symbol in the field name. A maximum of 30 legs can be included in the request. This code is usually three digits long, for example: SFO = San Francisco. Do not use the colon (:) or the hyphen (-). For a complete list of airport codes, see IATA's City Code Directory. In your request, send either the **complete_route** field or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the complete route takes precedence over the individual legs.	This field is optional. See "Using Decision Manager," page 77.	Alpha String (3)
journey_leg#_orig	Airport code for the origin leg of the trip designated by the pound (#) symbol in the field name. A maximum of 30 legs can be included in the request. This code is usually three digits long, for example: SFO = San Francisco. Do not use the colon (:) or the hyphen (-). For a complete list of airport codes, see IATA's City Code Directory. In your request, send either the **complete_route** field or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the complete route takes precedence over the individual legs.	This field is optional. See "Using Decision Manager," page 77.	Alpha String (3)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
journey_type	Type of travel, such as: one way or round trip.	This field is optional. See "Using Decision Manager," page 77.	AlphaNumericPunctuation String (32)
line_item_count	Total number of line items. Maximum number is 200.	This field is required if you include any item fields in the request.	Numeric String (2)
locale	Indicates the language to use for customer-facing content. Possible value: en-us. See "Activating a Profile," page 45. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	Locale String (5)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
merchant_defined_data#	Optional fields that you can use to store information (see page 36). # can range from 1 to 100. Merchant-defined data fields 1 to 4 are stored against the payment token and are used for subsequent token based transactions. Merchant defined data fields 5 to 100 are passed trough to Decision Manager as part of the initial payment request and are not stored against the payment token. **Important** Merchant-defined data fields are not intended to and MUST NOT be used to capture personally identifying information. Accordingly, merchants are prohibited from capturing, obtaining, and/or transmitting any personally identifying information in or via the merchant-defined data fields and any Secure Acceptance field that is not specifically designed to capture personally identifying information. Personally identifying information includes, but is not limited to, card number, bank account number, social security number, driver's license number, state-issued identification number, passport number, card verification numbers (CVV, CVC2, CVV2, CID, CVN). In the event CyberSource discovers that a merchant is capturing and/or transmitting personally identifying information via the merchant-defined data fields, whether or not intentionally, CyberSource WILL immediately suspend the merchant's account, which will result in a rejection of any and all transaction requests submitted by the merchant after the point of suspension.	This field is optional. See "Using Decision Manager," page 77.	AlphaNumericPunctuation String (100)
merchant_secure_data4	Optional field that you can use to store information. CyberSource encrypts the data before storing it in the database.	This field is optional.	AlphaNumericPunctuation String (2000)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
merchant_secure_data1 merchant_secure_data2 merchant_secure_data3	Optional fields that you can use to store information. CyberSource encrypts the data before storing it in the database.	This field is optional.	AlphaNumericPunctuation String (100)
override_backoffice_post_url	Overrides the backoffice post URL profile setting with your own URL.	This field is optional.	URL String (255)
override_custom_cancel_page	Overrides the custom cancel page profile setting with your own URL.	This field is optional.	URL String (255)
override_custom_receipt_page	Overrides the custom receipt profile setting with your own URL. **Important** CyberSource recommends signing this field.	This field is optional.	URL String (255)
override_paypal_order_setup	Overrides the paypal order setup profile setting. Possible values: ■ include_authorization: the paypal order is created and authorized. ■ exclude_authorization: the paypal order is created but not authorized.	This field is optional. See "Enabling PayPal Express Checkout," page 25.	String (21)
passenger_email	Passenger's email address.	This field is optional. See "Using Decision Manager," page 77.	String (255)
passenger_fiirstname	Passenger's first name.	This field is optional. See "Using Decision Manager," page 77.	String (60)
passenger_id	ID of the passenger to whom the ticket was issued. For example, you can use this field for the frequent flyer number.	This field is optional. See "Using Decision Manager," page 77.	String (32)
passenger_lastname	Passenger's last name.	This field is optional. See "Using Decision Manager," page 77.	String (60)
passenger_phone	Passenger's phone number. If the order is from outside the U.S., CyberSource recommends that you include the country code.	This field is optional. See "Using Decision Manager," page 77.	String (15)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
passenger_status	Your company's passenger classification, such as with a frequent flyer number. In this case, you might use values such as standard, gold, or platinum.	This field is optional. See "Using Decision Manager," page 77.	String (32)
passenger_type	Passenger classification associated with the price of the ticket. You can use one of the following values: ■ ADT: Adult ■ CNN: Child ■ INF: Infant ■ YTH: Youth ■ STU: Student ■ SCR: Senior Citizen ■ MIL: Military	This field is optional. See "Using Decision Manager," page 77.	String (32)
payment_method	Method of payment. Possible values: ■ card ■ echeck ■ paypal ■ visacheckout	Required by the Secure Acceptance application.	Enumerated String String (30)
payment_token	Identifier for the payment details. The payment token retrieves the card data, billing information, and shipping information from the CyberSource database. When this field is included in the request, the card data, and billing and shipping information are optional. You must be currently using CyberSource Payment Tokenization services. Populate this field with the customer subscription ID. **Important** This field is required for token-based transactions.	■ authorization or sale (R) ■ authorization,update_payment_token (R) ■ sale,update_payment_token (R) ■ update_payment_token (R)	Numeric String (26)
payment_token_comments	Optional comments you have for the customer subscription.	This field is optional.	AlphaNumericPunctuation String (255)
payment_token_title	Name or title for the customer subscription.	This field is optional.	AlphaNumericPunctuation String (60)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
profile_id	Identifies the profile to use with each transaction. **Important** To prevent data tampering CyberSource recommends signing this field.	Assigned by the Secure Acceptance application.	ASCIIAlphaNumericPunctuation String (36)
promotion_code	Promotion code for a transaction.	This field is optional.	String (100)
recurring_amount	Payment amount for each installment or recurring subscription payment.	■ create_payment_token (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Amount String (15)
recurring_automatic_renew	Indicates whether to automatically renew the payment schedule for an installment subscription. Possible values: ■ true (default): automatically renew. ■ false: do not automatically renew.	■ create_payment_token (O) ■ authorization,create_payment_token (O) ■ sale,create_payment_token (O) ■ update_payment_token (O)	Enumerated String String (5)
recurring_frequency	Frequency of payments for an installment or recurring subscription. Possible values: ■ weekly: every 7 days. ■ bi-weekly: every 2 weeks. ■ quad-weekly: every 4 weeks. ■ monthly ■ semi-monthly: twice every month (1st and 15th). ■ quarterly ■ semi-annually: twice every year. ■ annually	■ create_payment_token (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Enumerated String String (20)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
recurring_number_of_installments	Total number of payments set up for an installment subscription. Maximum values: ■ 156: weekly ■ 130: bi-weekly ■ 65: quad-weekly ■ 60: monthly ■ 24: semi-monthly ■ 20: quarterly ■ 10: semi-annually ■ 5: annually	■ create_payment_token (R) ■ authorization,create_payment_token (R) ■ sale,create_payment_token (R) ■ update_payment_token (O)	Numeric String (3)
recurring_start_date	First payment date for an installment or recurring subscription payment. Date must use the format YYYYMMDD. If a date in the past is supplied, the start date defaults to the day after the date was entered.	■ create_payment_token (O) ■ authorization,create_payment_token (O) ■ sale,create_payment_token (O) ■ update_payment_token (O)	Date (b) String (8)
reference_number	Unique merchant-generated order reference or tracking number for each transaction. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	AlphaNumericPunctuation Asia, Middle East, and Africa Gateway: String (40) Atos: String (32) All other processors: String (50)
returns_accepted	Indicates whether product returns are accepted. This field can contain one of the following values: ■ true ■ false	This field is optional. See "Using Decision Manager," page 77.	Enumerated String String (5)
ship_to_address_city	City of shipping address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (50)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_country	Country code for the shipping address. Use the two-character ISO country codes. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	Alpha String (2)
ship_to_address_line1	First line of shipping address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (60)
ship_to_address_line2	Second line of shipping address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (60)
ship_to_address_postal_code	Postal code for the shipping address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (10)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_address_state	State or province of shipping address. Use the two-character ISO state and province codes. **Important** This field is required if shipping address is U.S. and Canada. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (2)
ship_to_company_name	Name of the company receiving the product. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (40)
ship_to_forename	First name of the person receiving the product. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (60)
ship_to_phone	Phone number of the shipping address. **Important** This value can be entered by your customer during the checkout process, or you can include this field in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	Phone String (15)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
ship_to_surname	Last name of the person receiving the product. **Important** This can be entered by your customer during the checkout process, or you can include this in your request to Secure Acceptance. See "Displaying Shipping Information Fields," page 31.	This field is optional.	AlphaNumericPunctuation String (60)
shipping_method	Shipping method for the product. Possible values: ■ sameday: courier or same-day service ■ oneday: next day or overnight service ■ twoday: two-day service ■ threeday: three-day service ■ lowcost: lowest-cost service ■ pickup: store pick-up ■ other: other shipping method ■ none: no shipping method	This field is optional.	Enumerated String String (10)
signature	Merchant-generated Base64 signature. This is generated using the signing method for the **access_key** field supplied.	Required by the Secure Acceptance application.	AlphaNumericPunctuation
signed_date_time	The date and time that the signature was generated. Must be in UTC Date & Time format. This field is used to check for duplicate transaction attempts. **Important** Your system time must be accurate to avoid payment processing errors related to the **signed_date_time** field. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	ISO 8601 Date String (20)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
signed_field_names	A comma-separated list of request fields that are signed. This field is used to generate a signature that is used to verify the content of the transaction to protect it from tampering. **Important** All request fields should be signed to prevent data tampering, with the exception of the **card_number** field and the signature field. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	AlphaNumericPunctuation Variable
skip_bin_lookup	Indicates whether to skip the BIN lookup service. See page 23. This field can contain one of the following values: ■ true ■ false	This field is optional.	Enumerated String String (5)
skip_decision_manager	Indicates whether to skip Decision Manager. See page 77. This field can contain one of the following values: ■ true (decision manager is not enabled for this transaction, and the device fingerprint ID will not be displayed) ■ false	This field is optional.	Enumerated String String (5)
tax_amount	Total tax amount to apply to the order. This value cannot be negative. **Important** To prevent data tampering CyberSource recommends signing this field.	This field is optional.	Amount String (15)

Table 6 Request Fields (Continued)

Field Name	Description	Used By: Required (R) or Optional (O)	Data Type & Length
transaction_type	The type of transactions: ■ authorization ■ authorization,create_payment_token ■ authorization,update_payment_token ■ sale ■ sale,create_payment_token ■ sale,update_payment_token ■ create_payment_token ■ update_payment_token **Note** Only authorization and sale are supported for Visa Checkout transactions. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	Enumerated String String (60)
transaction_uuid	Unique merchant-generated identifier. Include with the **access_key** field for each transaction. This identifier must be unique for each transaction. This field is used to check for duplicate transaction attempts. **Important** To prevent data tampering CyberSource recommends signing this field.	Required by the Secure Acceptance application.	ASCIIAlphaNumericPunctuation String (50)
unsigned_field_names	A comma-separated list of request fields that are not signed. **Important** To prevent data tampering CyberSource recommends signing this field even if no value is included in this field.	Required by the Secure Acceptance application.	AlphaNumericPunctuation Variable

Reply Fields

Reply fields are sent using the following notification methods:

- Merchant POST URL (see page 34)
- Merchant POST Email (see page 34)
- POSTed to the URL specified in the Transaction or Custom Cancel Response page (see page 37)

Notification methods are enabled on the Notifications and Customer Response pages of your Secure Acceptance profile.

To ensure the integrity of the reply fields, a signature is included in the response. This signature is generated using the same **secret_key** value that was used to generate the request signature.

To verify that the reply fields have not been tampered with, create a signature using the fields listed in the **signed_field_names** reply field. This signature must be the same value that is included in the signature response field. Refer to the receipt page that is included in the sample scripts (see page 46).

Important

Because CyberSource may add reply fields and reason codes at any time, proceed as follows:

- Parse the reply data according to the names of the fields instead of their order in the reply. For more information on parsing reply fields, see the documentation for your scripting language.
- The signature that you generate must be the same value that is included in the signature response field.
- Your error handler should use the **decision** field to determine the transaction result if it receives a reason code that it does not recognize.

Note

If configured, these API reply fields are sent back to your Merchant POST URL or email. See page 34. Your error handler should use the **decision** field to obtain the transaction result if it receives a reason code that it does not recognize.

Table 7 API Reply Fields

Field Name	Description	Data Type and Length
auth_affluence_indicator	***Chase Paymentech Solutions*** Indicates whether a customer has high credit limits. This information enables you to market high cost items to these customers and to understand the kinds of cards that high income customers are using. This field is supported for Visa, MasterCard, Discover, and Diners Club. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown ***Litle*** Flag that indicates that a Visa cardholder or MasterCard cardholder is in one of the affluent categories. Possible values: ■ AFFLUENT: High income customer with high spending pattern (>100k USD annual income and >40k USD annual card usage). ■ MASS AFFLUENT: High income customer (>100k USD annual income).	Chase Paymentech Solution: String (1) Litle: String (13)
auth_amount	Amount that was authorized.	String (15)
auth_avs_code	AVS result code. See "AVS Codes."	String (1)
auth_avs_code_raw	AVS result code sent directly from the processor. Returned only if a value is returned by the processor.	String (10)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
auth_card_commercial	Indicates whether the card is a commercial card, which enables you to include Level II data in your transaction requests. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa and MasterCard on Chase Paymentech Solutions.	String (1)
auth_card_healthcare	Indicates whether the card is a healthcare card. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa and MasterCard on Chase Paymentech Solutions.	String (1)
auth_card_issuer_country	Country in which the card was issued. This information enables you to determine whether the card was issued domestically or internationally. Use the two-character *ISO Standard Country Codes*. **Note** This field is supported for Visa, MasterCard, Discover, Diners Club, JCB, and Maestro (International) on Chase Paymentech Solutions.	String (3)
auth_card_level_3_eligible	Indicates whether the card is eligible for Level III interchange fees, which enables you to include Level III data in your transaction requests. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa and MasterCard on Chase Paymentech Solutions.	String (1)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
auth_card_payroll	Indicates whether the card is a payroll card. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa, Discover, Diners Club, and JCB on Chase Paymentech Solutions.	String (1)
auth_card_pinless_debit	Indicates whether the card is a PINless debit card. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa and MasterCard on Chase Paymentech Solutions.	String (1)
auth_card_prepaid	Indicates whether the card is a prepaid card. This information enables you to determine when a gift card or prepaid card is presented for use when establishing a new recurring billing or installment billing relationship. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa, MasterCard, Discover, Diners Club, and JCB on Chase Paymentech Solutions.	String (1)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
auth_card_regulated	Indicates whether the card is regulated according to the Durbin Amendment. If the card is regulated, the card issuer is subject to price caps and interchange rules. Possible values: ■ Y: Yes (assets greater than $10B) ■ N: No (assets less than $10B) ■ X: Not applicable / Unknown **Note** This field is supported for Visa, MasterCard, Discover, Diners Club, and JCB on Chase Paymentech Solutions.	String (1)
auth_card_signature_debit	Indicates whether the card is a signature debit card. This information enables you to alter the way an order is processed. Possible values: ■ Y: Yes ■ N: No ■ X: Not applicable / Unknown **Note** This field is supported for Visa, MasterCard, and Maestro (International) on Chase Paymentech Solutions.	String (1)
auth_code	Authorization code. Returned only if a value is returned by the processor.	String (7)
auth_cv_result	CVN result code. See "CVN Codes."	String (1)
auth_cv_result_raw	CVN result code sent directly from the processor. Returned only if a value is returned by the processor.	String (10)
auth_response	For most processors, this is the error message sent directly from the bank. Returned only if a value is returned by the processor.	String (10)
auth_time	Time of authorization in UTC.	String (20)
auth_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
bill_trans_ref_no	Reference number that you use to reconcile your CyberSource reports with your processor reports.	String (60)
bin_lookup_billing_currency	Card holder's billing currency. Use the three-character ISO currency code.	String (3)
bin_lookup_billing_currency_minor_digits	Number of decimal positions for amounts in the card holder's billing currency.	String (1)
bin_lookup_card_category	Category of card, such as gold, platinum, or premier.	String
bin_lookup_card_group	Card type, such as Visa, MasterCard, or American Express.	String
bin_lookup_card_type	Kind of card, such as debit, corporate, or prepaid.	String
bin_lookup_cross_border_indicator	Indicates whether the card can be used internationally. Possible values: ■ Y ■ N	String (1)
bin_lookup_fast_funds_indicator	Speed at which funds are delivered to the account. Possible values: ■ B: Within 30 minutes ■ C: Within 30 minutes ■ D: Within 30 minutes ■ N: Within 2 business days	String (1)
bin_lookup_issued_currency	Currency in which the card was issued. Use the three-character ISO currency code.	String (3)
bin_lookup_issuer_country	Country of the issuing bank. Use the two-character ISO Standard Country Codes.	String (2)
bin_lookup_issuer_name	Bank that issued the card, such as Bank of America, Chase, or Wells Fargo.	String
bin_lookup_issuer_phone	Customer service phone number for the issuing bank.	String

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
bin_lookup_level_2_eligible	Indicates whether the card can be used for Level II transactions. Possible values: ■ Y ■ N	String (1)
bin_lookup_level_3_eligible	Indicates whether the card can be used for Level III transactions. Possible values: ■ Y ■ N	String (1)
bin_lookup_message	Message that explains the reply flag **bin_lookup_rflag**. Do not display this message to the customer, and do not use this field to write an error handler.	String (255)
bin_lookup_oct_eligible	Indicates whether the account can receive original credit transactions (OCTs). Possible values: ■ Y ■ N	String (1)
bin_lookup_oct_gambling_eligible	Indicates whether the account can receive original credit transactions (OCTs) for gambling transactions. Possible values: ■ Y ■ N	String (1)
bin_lookup_reason_code	Reason code	String (3)
bin_lookup_request_time	Time in UTC when the BIN lookup service was requested.	Date and Time (20)
decision	The result of your request. Possible values: ■ ACCEPT ■ DECLINE ■ REVIEW ■ ERROR See "Types of Notifications," page 143.	String (7)
echeck_debit_ref_no	Reference number for the transaction.	String (60)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
echeck_debit_submit_time	Time when the debit was requested in UTC.	Date and Time (20)
exchange_rate	Exchange rate if a currency conversion occurred. **Note** The 17 characters include the decimal point.	Decimal (17)
invalid_fields	Indicates which request fields were invalid.	Variable
message	Reply message from the payment gateway.	String (255)
payer_authentication_cavv	Cardholder authentication verification value (CAVV). Transaction identifier generated by the issuing bank or by Visa Checkout. This field is used by the payer authentication validation service.	String (50)
payer_authentication_eci	Electronic commerce indicator (ECI). This field is used by payer authentication validation and enrollment services. Possible values for Visa, American Express, and JCB: ■ 05: Successful authentication. ■ 06: Authentication attempted. ■ 07: Failed authentication. Possible values for MasterCard: ■ 01: Merchant is liable. ■ 02: Card issuer is liable.	String (3)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payer_authentication_enroll_e_commerce_indicator	Commerce indicator for cards not enrolled. This field contains one of these values: ■ internet: Card not enrolled or card type not supported by payer authentication. No liability shift. ■ js_attempted: JCB card not enrolled, but attempt to authenticate is recorded. Liability shift. ■ js_failure: J/Secure directory service is not available. No liability shift. ■ spa: MasterCard card not enrolled in the SecureCode program. No liability shift. ■ vbv_attempted: Visa card not enrolled, but attempt to authenticate is recorded. Liability shift. ■ vbv_failure: For payment processor Barclays, Streamline, AIBMS, or FDC Germany, you receive this result if Visa's directory service is not available. No liability shift.	String (255)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payer_authentication_enroll_veres_enrolled	Result of the enrollment check. This field can contain one of these values: ■ Y: Card enrolled or can be enrolled; you must authenticate. Liability shift. ■ N: Card not enrolled; proceed with authorization. Liability shift. ■ U: Unable to authenticate regardless of the reason. No liability shift. **Note** This field applies only to the Asia, Middle East, and Africa Gateway. If you are configured for this processor, you must send the value of this field in your authorization request. The following value can be returned if you are using rules-based Payer Authentication: ■ B: Indicates that authentication was bypassed. For Rules-Based Payer Authentication information see the *Payer Authentication Using the SCMP API* (PDF | HTML) or *Payer Authentication Using the Simple Order API* (PDF | HTML).	String (255)
payer_authentication_pares_status	Raw result of the authentication check. This field can contain one of these values: ■ A: Proof of authentication attempt was generated. ■ N: Customer failed or cancelled authentication. Transaction denied. ■ U: Authentication not completed regardless of the reason. ■ Y: Customer was successfully authenticated.	String (255)
payer_authentication_pares_timestamp	Decrypted time stamp for the payer authentication result. Visa Checkout generates this value. Format: Unix time, which is also called *epoch time*.	String

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payer_authentication_proof_xml	XML element containing proof of enrollment checking. For cards not issued in the U.S. or Canada, your bank may require this data as proof of enrollment validation for any payer authentication transaction that you re-present because of a chargeback. For cards issued in the U.S. or Canada, Visa may require this data for specific merchant category codes.	String (1024)
payer_authentication_reason_code	Numeric value corresponding to the result of the payer authentication request. See "Reason Codes," page 140.	String (5)
payer_authentication_uad	MasterCard SecureCode UCAF authentication data. Returned only for MasterCard SecureCode transactions.	String (32)
payer_authentication_uci	MasterCard SecureCode UCAF collection indicator. This field indicates whether authentication data is collected at your web site. Possible values: ■ 0: Authentication data was not collected and customer authentication not completed. ■ 1: Authentication data was not collected because customer authentication not completed. ■ 2: Authentication data was collected. Customer completed authentication.	String (1)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payer_authentication_validate_e_commerce_indicator	Indicator that distinguishes Internet transactions from other types. The authentication failed if this field is not returned. For Visa, if your payment processor is Streamline, Barclays, AIBMS, or FDC Germany, you receive the value vbv_failure instead of internet when **payer_authentication_eci** is not present. The value of this field is passed automatically to the authorization service if you request the services together. This field contains one of these values: ■ aesk: American Express SafeKey authentication verified successfully. ■ aesk_attempted: Card not enrolled in American Express SafeKey, but the attempt to authenticate was recorded. ■ internet: Authentication was not verified successfully. ■ js: J/Secure authentication verified successfully. ■ js_attempted: JCB card not enrolled in J/Secure, but the attempt to authenticate was recorded. ■ spa: MasterCard SecureCode authentication verified successfully. ■ spa_failure: MasterCard SecureCode failed authentication. ■ vbv: Verified by Visa authentication verified successfully. ■ vbv_attempted: Card not enrolled in Verified by Visa, but the attempt to authenticate was recorded. ■ vbv_failure: Verified by Visa authentication unavailable.	String (255)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payer_authentication_validate_result	Raw authentication data that comes from the card-issuing bank that indicates whether authentication was successful and whether liability shift occurred. This field contains one of these values: ■ -1: Invalid PARes. ■ 0: Successful validation. ■ 1: Cardholder is not participating, but the attempt to authenticate was recorded. ■ 6: Issuer unable to perform authentication. ■ 9: Cardholder did not complete authentication.	String (255)
payer_authentication_veres_timestamp	Decrypted time stamp for the verification response. Visa Checkout generates this value. Format: Unix time, which is also called *epoch time*.	String
payer_authentication_xid	Transaction identifier generated by CyberSource Payer Authentication. Used to match an outgoing PA request with an incoming PA response.	String (28)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
payment_token	Identifier for the payment details. The payment token retrieves the card data, billing information, and shipping information from the CyberSource database. This payment token supercedes the previous payment token and is returned if: ■ The merchant is configured for a 16 digit payment token which displays the last four digits of the primary account number (PAN) and passes Luhn mod-10 check. See page 14. ■ The consumer has updated the card number on their payment token. This payment token supercedes the previous payment token and should be used for subsequent transactions. **Important** You must be currently using CyberSource Payment Tokenization services. Populate this field with the customer subscription ID.	String (26)
paypal_address_status	Status of the street address on file with PayPal. Possible values: ■ None ■ Confirmed ■ Unconfirmed	String (12)
paypal_authorization_correlation_id	PayPal identifier that is used to investigate any issues.	String (20)
paypal_authorization_transaction_id	Unique identifier for the transaction.	String (17)
paypal_customer_email	Email address of the customer as entered during checkout. PayPal uses this value to pre-fill the PayPal membership sign-up portion of the PayPal login page.	String (127)
paypal_do_capture_correlation_id	PayPal identifier that is used to investigate any issues.	String (20)
paypal_do_capture_transaction_id	Unique identifier for the transaction.	String (17)
paypal_ec_get_details_correlation_id	PayPal identifier that is used to investigate any issues.	String (20)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
paypal_ec_get_details_request_id	Value of the request ID returned from a PayPal get details service request.	String (26)
paypal_ec_get_details_transaction_id	Unique identifier for the transaction.	String (17)
paypal_ec_order_setup_correlation_id	PayPal identifier that is used to investigate any issues.	String (20)
paypal_ec_order_setup_transaction_id	Unique identifier for the transaction.	String (17)
paypal_ec_set_request_id	Value of the request ID returned from a PayPal set service request.	String (26)
paypal_fee_amount	PayPal fee charged for the transaction. This value does not exceed the equivalent of 10,000 USD in any currency and does not include a currency symbol. The decimal separator is a period (.), and the optional thousands separator is a comma (,).	String (9)
paypal_order_request_id	Value of the request ID returned from a PayPal order setup service request.	String (26)
paypal_payer_id	Customer's PayPal account identification number.	Alphanumeric String (13)
paypal_payer_status	Customer's status. Possible values: ■ verified ■ unverified	String (10)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
paypal_pending_reason	Indicates the reason that payment is pending. Possible values: ■ address: Your customer did not include a confirmed shipping address, and your Payment Receiving preferences are set to manually accept or deny such payments. To change your preferences, go to the Preferences section of your PayPal profile. ■ authorization: The payment has been authorized but not settled. You need to capture the authorized amount. ■ echeck: Payment was made by an eCheck that has not yet cleared. ■ intl: You have a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this payment in your PayPal Account Overview. ■ multi-currency: You do not have a balance in the currency sent, and your Payment Receiving preferences are not set to automatically convert and accept this payment. You must manually accept or deny this payment in your PayPal Account Overview. ■ none: No pending reason. ■ order: The payment is part of an order that has been authorized but not settled. ■ paymentreview: The payment is being reviewed by PayPal for possible fraud. ■ unilateral: The payment was made to an email address that is not registered or confirmed. ■ verify: Your account is not yet verified. You must verify your account before you can accept this payment.	String (14)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
paypal_pending_status	Status of the transaction. Possible values: ■ Canceled-Reversal: PayPal canceled the reversal, which happens when you win a dispute and the funds for the reversal are returned to you. ■ Completed: PayPal completed the payment and added the funds to your account. ■ Denied: You denied a payment, which happens only if the payment was pending for the reason indicated in the **reason_code** field. ■ Expired: The authorization expired. ■ Failed: The payment failed. This event can happen only when the payment is made from your customer's bank account. ■ In-Progress: The transaction has not been completed yet. ■ None: No status. ■ Partially-Refunded: The payment was partially refunded. ■ Pending: The payment is pending for the reason indicated in the **paypal_pending_reason** field. ■ Processed: PayPal accepted the payment. ■ ReasonCode ■ Refunded: You refunded the payment. ■ Reversed: PayPal reversed the payment for the reason specified in the **reason_code** field. The funds were transferred from your account to the customer's account. ■ Voided: The authorization was voided	String (20)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
paypal_protection_eligibility	Seller protection in force for the transaction. Possible values: ■ Eligible: You are protected by the PayPal Seller Protection Policy for unauthorized payment and item not received. ■ PartiallyEligible: You are protected by the PayPal Seller Protection Policy for item not received. ■ Ineligible: You are not protected under the PayPal Seller Protection Policy.	String (17)
paypal_protection_eligibility_type	Seller protection in force for the transaction. Possible values: ■ Eligible: You are protected by the PayPal Seller Protection Policy for unauthorized payment and item not received. ■ ItemNotReceivedEligible: You are protected by the PayPal Seller Protection Policy for item not received. ■ UnauthorizedPaymentEligible: You are protected by the PayPal Seller Protection Policy for unauthorized payment. ■ Ineligible: You are not protected under the PayPal Seller Protection Policy. **Note** To enable the **paypal_protection_eligibility_type** field, contact CyberSource Customer Support to have your account configured for this feature.	String (32)
paypal_request_id	Identifier for the request generated by the client.	String (26)
paypal_token	Timestamped paypal token which identifies that PayPal Express Checkout is processing the transaction. You need to save this value to send in future request messages.	String (20)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
paypal_transaction_type	Indicates the paypal transaction type. Possible value: expresscheckout	String (16)
reason_code	Numeric value corresponding to the result of the credit card request. See "Reason Codes," page 140.	String (5)
req_access_key	Authenticates the merchant with the application.	String (32)
req_allow_payment_token_update	Indicates whether the customer can update the billing, shipping, and payment information on the order review page. This field can contain one of the following values: ■ true: customer can update details. ■ false: customer cannot update details.	String (5)
req_amount	Total amount for the order. Must be greater than or equal to zero.	String (15)
req_bill_payment	Flag that indicates a payment for a bill or for an existing contractual loan.Visa provides a Bill Payment program that enables customers to use their Visa cards to pay their bills. Possible values: ■ true: Bill payment or loan payment. ■ false (default): Not a bill payment or loan payment.	String (1)
req_bill_to_address_city	City in the billing address.	String (50) Visa Checkout: String (100)
req_bill_to_address_country	Country code for the billing address. Use the two-character ISO country codes.	String (2)
req_bill_to_address_line1	First line of the street address in the billing address.	String (60) Visa Checkout: String (100)
req_bill_to_address_line2	Second line of the street address in the billing address.	String (60) Visa Checkout: String (100)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_bill_to_address_postal_code	Postal code for the billing address.	String (10) Visa Checkout: String (100)
req_bill_to_address_state	State or province in the billing address. The two-character ISO state and province code. This field is required for U.S and Canada.	String (2 for U.S. and Canada, otherwise 60)
req_bill_to_company_name	Name of the customer's company.	String (40)
req_bill_to_email	Customer email address.	String (255) Visa Checkout: String (256)
req_bill_to_forename	Customer first name.	String (60) Visa Checkout: String (256)
req_bill_to_phone	Customer phone number.	String (15) Visa Checkout: String (30)
req_bill_to_surname	Customer last name.	String (60) Visa Checkout: String (265)
req_card_expiry_date	Card expiration date.	String (7)
req_card_number	Card number.	String (20)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_card_type	Type of card. Possible values: ■ 001: Visa ■ 002: MasterCard ■ 003: American Express ■ 004: Discover ■ 005: Diners Club ■ 006: Carte Blanche ■ 007: JCB ■ 014: EnRoute ■ 021: JAL ■ 024: Maestro UK Domestic ■ 031: Delta ■ 033: Visa Electron ■ 034: Dankort ■ 036: Carte Bleue ■ 037: Carta Si ■ 042: Maestro International ■ 043: GE Money UK card ■ 050: Hipercard (sale only) ■ 054: Elo **Important** With Visa Checkout, only values 001, 002, 003, and 004 are supported. If any other card type is used, 000 is returned in the response.	String (3)
req_company_tax_id	Company's tax identifier. The the last four digits are not masked.	String (9)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_complete_route	Concatenation of individual travel legs in the format: SFO-JFK:JFK-LHR:LHR-CDG. For a complete list of airport codes, see IATA's City Code Directory. In your request, send either the complete route field or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the value of **complete_route** takes precedence over that of the **journey_leg#** fields.	String (255)
req_consumer_id	Identifier for the customer account. This value is defined when creating a customer subscription.	String (50)
req_currency	Currency used for the order. See ISO currency codes.	String (3)
req_customer_cookies_accepted	Indicates whether the customer's browser accepts cookies. This field can contain one of the following values: ■ true: customer browser accepts cookies. ■ false: customer browser does not accept cookies.	String (5)
req_customer_gift_wrap	Indicates whether the customer requested gift wrapping for this purchase. This field can contain one of the following values: ■ true: customer requested gift wrapping. ■ false: customer did not request gift wrapping.	String (5)
req_customer_ip_address	Customer's IP address reported by your web server using socket information.	
req_date_of_birth	Date of birth of the customer. Use the format: YYYYMMDD.	String (8)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_debt_indicator	Flag that indicates a payment for an existing contractual loan under the VISA Debt Repayment program. Contact your processor for details and requirements. Possible formats: ■ false (default): not a loan payment ■ true: loan payment	String (5)
req_departure_time	Departure date and time of the first leg of the trip. Use one of the following formats: ■ yyyy-MM-dd HH:mm z ■ yyyy-MM-dd hh:mm a z ■ yyyy-MM-dd hh:mma z ■ HH = 24-hour format ■ hh = 12-hour format ■ a = am or pm (case insensitive) ■ z = time zone of the departing flight.	String (29)
req_device_fingerprint_id	Field that contains the session ID for the fingerprint. The string can contain uppercase and lowercase letters, digits, and these special characters: hyphen (-) and underscore (_). However, do not use the same uppercase and lowercase letters to indicate different sessions IDs. The session ID must be unique for each merchant ID. You can use any string that you are already generating, such as an order number or web session ID.	String (88)
req_driver_license_number	Driver's license number of the customer. The last four digits are not masked.	String (30)
req_driver_license_state	State or province from which the customer's driver's license was issued. Use the two-character *State, Province, and Territory Codes for the United States and Canada*.	String (2)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_e_commerce_indicator	The commerce indicator for the transaction type. Value: install **Note** This field is required only for installment payments using the CyberSource Latin American Processing connection.	String (13)
req_echeck_account_number	Account number. This number is masked.	Non-negative integer (17)
req_echeck_account_type	Account type. Possible values: ■ C: checking ■ S: savings (USD only) ■ X: corporate checking (USD only)	String (1)
req_echeck_check_number	Check number.	Integer (8)
req_echeck_effective_date	Pre-post date for the transaction.	Date (b) String (8)
req_echeck_routing_number	Bank routing number. It is also called the *transit number*.	Non-negative integer (9)
req_ignore_avs	Ignore the results of AVS verification. Possible values: ■ true ■ false	String (5)
req_ignore_cvn	Ignore the results of CVN verification. Possible values: ■ true ■ false	String (5)
req_installment_total_count	Total number of installment payments as part of an authorization. Possible values: 1 to 99 **Note** This field is required only for installment payments using the CyberSource Latin American Processing connection.	Numeric String (2)
req_item_#_code	Type of product. # can range from 0 to 199.	String (255)
req_item_#_description	Description of the item. # can range from 0 to 199.	String (255)
req_item_#_name	Name of the item. # can range from 0 to 199.	String (255)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_item_#_quantity	Quantity of line items. # can range from 0 to 199.	String (10)
req_item_#_sku	Identification code for the product. # can range from 0 to 199.	String (255)
req_item_#_tax_amount	Tax amount to apply to the line item. # can range from 0 to 199. This value cannot be negative. The tax amount and the offer amount must be in the same currency.	String (15)
req_item_#_unit_price	Price of the line item. # can range from 0 to 199. This value cannot be negative.	String (15)
req_journey_leg#_dest	Airport code for the origin of the leg of the trip designated by the pound (#) symbol in the field name. A maximum of 30 legs can be included in the request. This code is usually three digits long; for example: SFO = San Francisco. Do not use the colon (:) or the hyphen (-). For a complete list of airport codes, see IATA's City Code Directory. In your request, send either the **complete_route** field or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the complete route takes precedence over the individual legs.	String (3)
req_journey_leg#_orig	Airport code for the origin of the leg of the trip designated by the pound (#) symbol in the field name. A maximum of 30 legs can be included in the request. This code is usually three digits long; for example: SFO = San Francisco. Do not use the colon (:) or the hyphen (-). For a complete list of airport codes, see IATA's City Code Directory. In your request, send the **complete_route** field or the individual legs (**journey_leg#_orig** and **journey_leg#_dest**). If you send all the fields, the complete route takes precedence over the individual legs.	String (3)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_journey_type	Type of travel, such as one way or round trip.	String (32)
req_line_item_count	Total number of line items. Maximum amount is 200.	String (2)
req_locale	Indicates the language to use for customer content. See "Activating a Profile," page 45.	String (5)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_merchant_defined_data#	Optional fields that you can use to store information. # can range from 1 to 100. Merchant-defined data fields 1 to 4 are stored against the payment token and are used for subsequent token-based transactions. Merchant-defined data fields 5 to 100 are passed through to Decision Manager as part of the initial payment request and are not stored against the payment token. **Important** Merchant-defined data fields are not intended to and MUST NOT be used to capture personally identifying information. Accordingly, merchants are prohibited from capturing, obtaining, and/or transmitting any personally identifying information in or via the merchant-defined data fields and any Secure Acceptance field that is not specifically designed to capture personally identifying information. Personally identifying information includes, but is not limited to, card number, bank account number, social security number, driver's license number, state-issued identification number, passport number, card verification numbers (CVV, CVC2, CVV2, CID, CVN). In the event CyberSource discovers that a merchant is capturing and/or transmitting personally identifying information via the merchant-defined data fields, whether or not intentionally, CyberSource WILL immediately suspend the merchant's account, which will result in a rejection of any and all transaction requests submitted by the merchant after the point of suspension.	String (100)
req_merchant_secure_data1 req_merchant_secure_data2 req_merchant_secure_data3	Optional fields that you can use to store information. CyberSource encrypts the data before storing it in the database.	String (100)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_merchant_secure_data4	Optional field that you can use to store information. CyberSource encrypts the data before storing it in the database.	String (2000)
req_override_backoffice_post_url	Overrides the backoffice post URL profile setting with your own URL.	URL (255)
req_override_custom_cancel_page	Overrides the custom cancel page profile setting with your own URL.	URL (255)
req_override_custom_receipt_page	Overrides the custom receipt profile setting with your own URL.	URL (255)
req_payment_method	Method of payment. Possible values: ■ card ■ echeck ■ visacheckout	String (30)
req_payment_token	Identifier for the payment details. The payment token retrieves the card data, billing information, and shipping information from the CyberSource database. When this field is included in the request, the card data and billing and shipping information are optional. You must be currently using CyberSource Payment Tokenization services. Populate this field with the customer subscription ID.	String (26)
req_payment_token_comments	Optional comments about the customer subscription.	String (255)
req_payment_token_title	Name of the customer subscription.	String (60)
req_profile_id	Identifies the profile to use with each transaction. Assigned by the Secure Acceptance application.	String (36)
req_promotion_code	Promotion code included in the transaction.	String (100)
req_recurring_amount	Payment amount for each installment or recurring subscription payment.	String (15)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_recurring_automatic_renew	Indicates whether to automatically renew the payment schedule for an installment subscription. Possible values: ■ true (default): automatically renew. ■ false: do not automatically renew.	Enumerated String String (5)
req_recurring_frequency	Frequency of payments for an installment or recurring subscription.	String (20)
req_recurring_number_of_ installments	Total number of payments set up for an installment subscription. Installments range from 1 to 156.	String (3)
req_recurring_start_date	First payment date for an installment or recurring subscription payment. Date must use the format YYYYMMDD. If a date in the past is supplied, the start date defaults to the day after the date was entered.	String (8)
req_reference_number	Unique merchant-generated order reference or tracking number for each transaction.	String (50)
req_returns_accepted	Indicates whether product returns are accepted. This field can contain one of the following values: ■ true ■ false	String (5)
req_ship_to_address_city	City of shipping address.	String (50) Visa Checkout: String (100)
req_ship_to_address_country	The two-character country code.	String (2)
req_ship_to_address_line1	First line of shipping address.	String (60) Visa Checkout: String (100)
req_ship_to_address_line2	Second line of shipping address.	String (60) Visa Checkout: String (100)
req_ship_to_address_postal_code	Postal code for the shipping address.	String (10) Visa Checkout: String (100)
req_ship_to_address_state**v**	The two-character ISO state and province code.	String (2)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
req_ship_to_company_name	Name of the company receiving the product.	String (40)
req_ship_to_forename	First name of person receiving the product.	String (60) Visa Checkout: String (256)
req_ship_to_phone	Phone number for the shipping address.	String (15) Visa Checkout: String (30)
req_ship_to_surname	Last name of person receiving the product.	String (60) Visa Checkout: String (256)
req_shipping_method	Shipping method for the product. Possible values: ■ sameday: Courier or same-day service ■ oneday: Next day or overnight service ■ twoday: Two-day service ■ threeday: Three-day service ■ lowcost: Lowest-cost service ■ pickup: Store pick-up ■ other: Other shipping method ■ none: No shipping method	String (10)
req_skip_bin_lookup	Indicates whether the BIN lookup service was skipped. See page 23.	Enumerated String String (5)
req_skip_decision_manager	Indicates whether to skip Decision Manager. See page 77. This field can contain one of the following values: ■ true ■ false	String (5)
req_tax_amount	Total tax to apply to the product.	String (15)
req_transaction_type	The type of transaction requested.	String (60)
req_transaction_uuid	Unique merchant-generated identifier. Include with the **access_key** field for each transaction.	String (50) Visa Checkout: String (100)

Table 7 API Reply Fields (Continued)

Field Name	Description	Data Type and Length
request_token	Request token data created by CyberSource for each reply. This field is an encoded string that contains no confidential information. ***Atos*** You must store the request token value so that you can retrieve and send it in follow-on requests.	String (256)
required_fields	Indicates which of the request fields were required but not provided.	Variable
service_fee_amount	The service fee amount for the order.	String (15)
signature	The Base64 signature returned by the server.	String (44)
signed_date_time	The date and time of when the signature was generated by the server. UTC date and time format: 2011-12-31T11:59:59Z	String (20)
signed_field_names	A comma-separated list of response data that was signed by the server. All fields within this list should be used to generate a signature that can then be compared to the response signature to verify the response.	Variable
transaction_id	The transaction identifier returned from the payment gateway.	String (26)
vc_avs_code_raw	Decrypted raw (unmapped) AVS code provided by Visa Checkout.	String (10)
vc_risk_score	Decrypted risk score used with your fraud model. See "Enabling Visa Checkout," page 24.	Positive Integer (2)
vc_wallet_reference_id	Decrypted order identifier generated by Visa Checkout.	String (100)

Reason Codes

The **reasonCode** field contains additional data regarding the decision response of the transaction. Depending on the decision of a transaction request, CyberSource's default receipt page or your receipt page is displayed to the customer. Both you and your customer may also receive an email receipt. See "Receiving Merchant Notifications," page 34.

Table 8 Reason Codes

Reason Code	Description
100	Successful transaction.
102	One or more fields in the request contain invalid data. Possible action: see the reply field **invalid_fields** to ascertain which fields are invalid. Resend the request with the correct information.
104	The **access_key** and **transaction_uuid** fields for this authorization request match the **access_key** and **transaction_uuid** fields of another authorization request that you sent within the past 15 minutes. Possible action: resend the request with a unique **access_key** and **transaction_uuid** fields.
110	Only a partial amount was approved.
150	General system failure. Possible action: wait a few minutes and resend the request.
151	The request was received but there was a server timeout. This error does not include timeouts between the client and the server. Possible action: wait a few minutes and resend the request.
152	The request was received, but a service timeout occurred. Possible action: wait a few minutes and resend the request.
200	The authorization request was approved by the issuing bank but declined by CyberSource because it did not pass the Address Verification System (AVS) check. Possible action: you can capture the authorization, but consider reviewing the order for fraud.
201	The issuing bank has questions about the request. You do not receive an authorization code programmatically, but you might receive one verbally by calling the processor. Possible action: call your processor to possibly receive a verbal authorization. For contact phone numbers, refer to your merchant bank information.
202	Expired card. You might also receive this value if the expiration date you provided does not match the date the issuing bank has on file. Possible action: request a different card or other form of payment.

Table 8 Reason Codes (Continued)

Reason Code	Description
203	General decline of the card. No other information was provided by the issuing bank. Possible action: request a different card or other form of payment.
204	Insufficient funds in the account. Possible action: request a different card or other form of payment.
205	Stolen or lost card. Possible action: review this transaction manually to ensure that you submitted the correct information.
207	Issuing bank unavailable. Possible action: wait a few minutes and resend the request.
208	Inactive card or card not authorized for card-not-present transactions. Possible action: request a different card or other form of payment.
210	The card has reached the credit limit. Possible action: request a different card or other form of payment.
211	Invalid CVN. Possible action: request a different card or other form of payment.
221	The customer matched an entry on the processor's negative file. Possible action: review the order and contact the payment processor.
222	Account frozen.
230	The authorization request was approved by the issuing bank but declined by CyberSource because it did not pass the CVN check. Possible action: you can capture the authorization, but consider reviewing the order for the possibility of fraud.
231	Invalid account number. Possible action: request a different card or other form of payment.
232	The card type is not accepted by the payment processor. Possible action: contact your merchant bank to confirm that your account is set up to receive the card in question.
233	General decline by the processor. Possible action: request a different card or other form of payment.
234	There is a problem with the information in your CyberSource account. Possible action: do not resend the request. Contact CyberSource Customer Support to correct the information in your account.
236	Processor failure. Possible action: wait a few minutes and resend the request.

Table 8 Reason Codes (Continued)

Reason Code	Description
240	The card type sent is invalid or does not correlate with the credit card number. Possible action: confirm that the card type correlates with the credit card number specified in the request; then resend the request.
475	The cardholder is enrolled for payer authentication. Possible action: authenticate cardholder before proceeding.
476	Payer authentication could not be authenticated.
481	Transaction declined based on your payment settings for the profile. Possible action: review the risk score settings for the profile.
520	The authorization request was approved by the issuing bank but declined by CyberSource based on your legacy Smart Authorization settings. Possible action: review the authorization request.

Types of Notifications

Table 9 Types of Notifications

Decision	Description	Type of Notification	CyberSource Hosted Page
ACCEPT	Successful transaction. Reason codes 100 and 110.	■ Custom receipt page ■ Customer receipt email ■ Merchant POST URL ■ Merchant receipt email	Accept
REVIEW	Authorization was declined; however, the capture may still be possible. Review payment details. See reason codes 200, 201, 230, and 520.	■ Custom receipt page ■ Customer receipt email ■ Merchant POST URL ■ Merchant receipt email	Accept
DECLINE	Transaction was declined. See reason codes 102, 200, 202, 203, 204, 205, 207, 208, 210, 211, 221, 222, 230, 231, 232, 233, 234, 236, 240, 475, 476, and 481.	■ Custom receipt page [1] ■ Merchant POST URL [1] ■ Merchant receipt email [1]	Decline
ERROR	Access denied, page not found, or internal server error. See reason codes 102, 104, 150, 151 and 152.	■ Custom receipt page ■ Merchant POST URL	Error
CANCEL	■ The customer did not accept the service fee conditions. ■ The customer cancelled the transaction.	■ Custom receipt page ■ Merchant POST URL	Cancel

[1] If the retry limit is set to 0, the customer receives the decline message, *Your order was declined. Please verify your information.* before the merchant receives it. The decline message relates to either the processor declining the transaction or a payment processing error, or the customer entered their 3D Secure credentials incorrectly.

AVS Codes

An issuing bank uses the AVS code to confirm that your customer is providing the correct billing address. If the customer provides incorrect data, the transaction might be fraudulent. The international and U.S. domestic Address Verification Service (AVS) codes are the Visa standard AVS codes, except for codes 1 and 2, which are CyberSource AVS codes. The standard AVS return codes for other types of credit cards (including American Express cards) are mapped to the Visa standard codes. You receive the code in the **auth_avs_code** reply field. See page 109.

Important When you populate billing street address 1 and billing street address 2, CyberSource through VisaNet concatenates the two values. If the concatenated value exceeds 40 characters, CyberSource through VisaNet truncates the value at 40 characters before sending it to Visa and the issuing bank. Truncating this value affects AVS results and therefore might also affect risk decisions and chargebacks.

International AVS Codes

These codes are returned only for Visa cards issued outside the U.S.

Table 10 International AVS Codes

Code	Response	Description
B	Partial match	Street address matches, but postal code is not verified.
C	No match	Street address and postal code do not match.
D & M	Match	Street address and postal code match.
I	No match	Address not verified.
P	Partial match	Postal code matches, but street address not verified.

U.S. Domestic AVS Codes

Table 11 U.S. Domestic AVS Codes

Code	Response	Description
A	Partial match	Street address matches, but five-digit and nine-digit postal codes do not match.
B	Partial match	Street address matches, but postal code is not verified.
C	No match	Street address and postal code do not match.
D & M	Match	Street address and postal code match.
E	Invalid	AVS data is invalid or AVS is not allowed for this card type.
F	Partial match	Card member's name does not match, but billing postal code matches. Returned only for the American Express card type.
H	Partial match	Card member's name does not match, but street address and postal code match. Returned only for the American Express card type.
I	No match	Address not verified.
J	Match	Card member's name, billing address, and postal code match. Shipping information verified and chargeback protection guaranteed through the Fraud Protection Program. Returned only if you are signed up to use AAV+ with the American Express Phoenix processor.
K	Partial match	Card member's name matches, but billing address and billing postal code do not match. Returned only for the American Express card type.
L	Partial match	Card member's name and billing postal code match, but billing address does not match. Returned only for the American Express card type.
M	Match	Street address and postal code match.
N	No match	One of the following: ■ Street address and postal code do not match. ■ Card member's name, street address, and postal code do not match. Returned only for the American Express card type.
O	Partial match	Card member's name and billing address match, but billing postal code does not match. Returned only for the American Express card type.
P	Partial match	Postal code matches, but street address not verified.
Q	Match	Card member's name, billing address, and postal code match. Shipping information verified but chargeback protection not guaranteed (Standard program). Returned only if you are signed to use AAV+ with the American Express Phoenix processor.
R	System unavailable	System unavailable.
S	Not supported	U.S.-issuing bank does not support AVS.

Table 11 U.S. Domestic AVS Codes (Continued)

Code	Response	Description
T	Partial match	Card member's name does not match, but street address matches. Returned only for the American Express card type.
U	System unavailable	Address information unavailable for one of these reasons: ■ The U.S. bank does not support non-U.S. AVS. ■ The AVS in a U.S. bank is not functioning properly.
V	Match	Card member's name, billing address, and billing postal code match. Returned only for the American Express card type.
W	Partial match	Street address does not match, but nine-digit postal code matches.
X	Match	Street address and nine-digit postal code match.
Y	Match	Street address and five-digit postal code match.
Z	Partial match	Street address does not match, but five-digit postal code matches.
1	Not supported	AVS is not supported for this processor or card type.
2	Unrecognized	The processor returned an unrecognized value for the AVS response.
3	Match	Address is confirmed. Returned only for PayPal Express Checkout.
4	No match	Address is not confirmed. Returned only for PayPal Express Checkout.

CVN Codes

Table 12 CVN Codes

Code	Description
D	The transaction was considered to be suspicious by the issuing bank.
I	The CVN failed the processor's data validation.
M	The CVN matched.
N	The CVN did not match.
P	The CVN was not processed by the processor for an unspecified reason.
S	The CVN is on the card but was not included in the request.
U	Card verification is not supported by the issuing bank.
X	Card verification is not supported by the card association.
1	Card verification is not supported for this processor or card type.
2	An unrecognized result code was returned by the processor for the card verification response.
3	No result code was returned by the processor.

APPENDIX B

iFrame Implementation

Important Internet Explorer and Safari handle third-party content differently. Therefore, you must consider these differences when implementing a standard Secure Acceptance Web/Mobile implementation or an iFrame implementation. Otherwise, payments may fail for customers using these browsers.

PayPal Express Checkout is not supported on a Secure Acceptance iFrame integration.

You must select the single page checkout option (see page 29) for Web/Mobile iFrame implementation.

Note The total amount value and the transaction cancel button are not displayed within the iFrame. Any settings that you configured for the total amount figure are ignored (see page 39).

Important CyberSource recommends that you manage the total amount value on your web site containing the inline frame. You must also provide customers a cancel order functionality on your web site containing the inline frame.

Clickjacking Prevention

Clickjacking (also known as *user-interface redress attack* and *iframe overlay*) is used by attackers to trick users into clicking on a transparent layer (with malicious code) above legitimate buttons or clickable content for a site. To prevent clickjacking, you must prevent third-party sites from including your web site within an iFrame.

While no security remediation can prevent every clickjacking, these are the minimum measures you must use for modern web browsers:

- Set HTTP response header X-FRAME_OPTIONS to either “DENY” or “SAMEORIGIN”.
- Provide frame-busting scripts to ensure that your page is always the top level window or disabling code for older browsers that do not support X-FRAME_OPTIONS.

Note

Do not use double framing on the same page where the Web/Mobile iFrame implementation is used.

You are required to implement the recommended prevention techniques in your web site. See the OWASP clickjacking page and the Cross-site scripting page for up to date information.

Web application protections for Cross-site Scripting (XSS), Cross-site Request Forgery (CSRF), etc. must also be incorporated.

- For XSS protection, you must implement comprehensive input validation and the OWASP-recommended security encoding library to do output encoding on your website.
- For CSRF protection, you are strongly encouraged to use a synchronized token pattern. This measure requires generating a randomized token associated with the user session. The token will be inserted whenever an HTTP request is sent to the server. Your server application will verify that the token from the request is the same as the one associated with the user session.

Endpoints

For iFrame transaction endpoints and supported transaction types for each endpoint, see "Endpoints and Transaction Types," page 47.